C/O PAULA

SEARCH REQUEST FORM



		Scientific and Te	chnical Info	rmation Center		# A	
	Requester's Full Art Unit: 1654 Mail Box & Bldg	Phone Num Room Locat.: CM1	ber: 305-5039 -11D13; 11D	04 Results Form	at Preferred: .	1 <u>/17/03</u> Fallow- 9/734,583 PAPER	ир
f more tha	an one search is	submitted, please p	orioritize sea	rches in order	of need. *******	*****	
Please provid nelude the el	le a detailed statemen lected species or struc	t of the search topic, and ctures, keywords, synonyi y terms that may have a s cover sheet, pertinent cl	ms, acronyms, a pecial meaning.	nd registry numbers Give examples or	and combine w	ith the concept or	
Title of Inv	vention:	<u> </u>		7	1		
Inventors (please provide full n	ames):					
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For Sequen	nce Searches Only Ple	ase include all pertinent ins (H Formulation	G FUMUUM 1, () (' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	approp	dis)-All	Cl's
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STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Sheppan	NA Sequence (#)	STN
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Searcher Location:	Structure (#)	Questel/Orbit
Date Searcher Picked Up:	Bibliographic	Dr.Link
Date Completed: 7/32/03	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	Fulltext	Sequence Systems
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Online Time:	N Other	Other (specify)
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=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 15:33:24 ON 21 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 21 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 20 Jul 2003 (20030720/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L44

L45\

L46

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126 SEA FILE=REGISTRY ABB=ON PLU=ON [G'BAL''DAB''ACA'][FY].WK[TG'

ABU'SCVAF] [FA'NLE'C]/SQSP

8 SEA FILE=REGISTRY ABB=ON PLU=ON L44 (AND CYCL?

(13) SEA FILE=HCAPLUS ABB=ON PLU=ON L45

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L46 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:793646 HCAPLUS

DOCUMENT NUMBER: 137:295256

TITLE: Preparation of cyclic peptides as somatostatin

agonists

INVENTOR(S): Coy, David H.; Rajeswaran, Walajapet G.

PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund, USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.		KII	ND.	DATE			A)	PPLI	CATI	ои ис	٥.	DATE			
WO 2002	20814	99	A	2	2002	1017		M	20 C	02-U	S108	82	20020	0408		
WO 2002	20814	99	A.	3	2003	0508										
W:	AE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
													KΖ,			
													NO,			
													TN,			
	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	ΑM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,

TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BL, CF, CG, CI, CM, GA, GN, GO, GW, MI, MP, NE, SN, TD, TC

BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 2001-282526P P 20010409

OTHER SOURCE(S): MARPAT 137:295256

AΒ The invention is directed to cyclic peptides A1-cyclo[Cys-A2-D-Trp-A3-A4-Cys]-A5-Y1 [A1 is an optionally-substituted D- or L-arom. .alpha.-amino acid or D- or L-cyclo(C3-6)alkylalanine; A2 is an optionally-substituted arom. .alpha.-amino acid or cyclo(C3-6)alkylalanine; A3 is Lys or Orn; A4, A5 = .beta.-hydroxyvaline, Ser, hSer, or Thr; Y1 is OH, NH2 or alkylamino; the substituent on the arom. .vsigma.-amino acid or cyclo(C3-6) alkylalanine is selected from halogen, NO2, OH, CN, alkyl, alkenyl, alkynyl, alkoxy, Bzl, O-Bzl, or an amino group; the amine nitrogen of each amide peptide bond and the amino group of Al is optionally substituted with a Me group (there is at least one Me group)] and their pharmaceutically-acceptable salts for use as somatostatin agonists. The solid-phase method was applied to the synthesis of 18 cyclic peptides of the invention, including NMe-D-Phe-cyclo[Cys-Phe-D-Trp-Lys-Thr-Cys]-Thr- $\rm NH2$ (1). Peptide 1 showed binding affinities Kd for cloned human sst1-5 receptors of 316 .+-. 11, 1.03 .+-. 0.26, 17.9 .+-. 2.5, >1.000, and 4.89 .+-. 1.4 nM, resp., and agonist activity IC50 = 0.32 .+-. 0.13 nM on culture rat pituitary cells:

IT **72127-62-9DP**, N-Me derivs.

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of cyclic peptides as somatostatin agonists)

L46 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:692513 HCAPLUS

DOCUMENT NUMBER:

138:117735

TITLE:

Human somatostatin receptor specificity of

backbone-cyclic analogs containing novel sulfur

building units

AUTHOR(S):

Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

SOURCE:

Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San

Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE: LANGUAGE:

Conference English

The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor dets. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared

to somatostatin that was degraded within a few minutes. **252845-45-7**, PTR 3213 **252845-47-9**, PTR 3219 **252845-48-0**, PTR 3221 IT

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2003 ACS on STN L46 ANSWER 3 OF 13

2

ACCESSION NUMBER:

2002:332670 HCAPLUS

DOCUMENT NUMBER:

136:341003

TITLE:

Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S):

Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S):

SOURCE:

GI

U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.

No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PA'	TENT	NO.		KI	ND	DATE			I	APPLI	CATI	ON N	0.	DATE			
119	2002	 0523	 15	7	 1	2002	0502		-	JS 20	00-7	2150		2000	1010		
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	6051						0418			JS 19				1998			
US	6355	613		В	1	2002	0312		Ţ	JS 19	98-2	0338	9	1998	1202		
WO	9965			A			1223			VO 19				1999			
	W:	ΑE,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD.	MG.	MK.
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,
		TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY.	KG.	KZ,
			RU,								•	•		•	•		,
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
		ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
		CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG			11	•	•
PRIORITY	APP:	LN.	INFO	. :					US 1	998-	1003	60	A2	1998	6/19		
								i	US 1	998-	20338	39	A2	19983	1202		
								1	WO 1	999-	IL329	9	A2	19990	0615		
								1	US 1	995-	4881	59	A2	19950	0607		
								1	US 1	.995-!	56904	12	A2	1995	1207		
								1	US 1	996-6	69060	09	A2	19960	0731		
OTHER SO	URCE	(S):			MAR	PAT :	136:3										

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Q = R5 - R6 - R7 - R8 - R9 - R10 - R11 - NR12 - X
              -со-(сн<sub>2</sub>)<sub>п</sub>---
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AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic

Ι

acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

TΤ 252845-45-7P, PTR 3213 252845-47-9P, PTR 3219 252845-48-0P, PTR 3221

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L46 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:276518 HCAPLUS

DOCUMENT NUMBER:

136:304089

TITLE:

Method of treating insulin insensitivity and syndrome

INVENTOR(S):

Cawthorne, Michael Anthony; Liu, Yong-ling; Sennitt,

Matthew V.

PATENT ASSIGNEE(S):

SOURCE:

UK U.S. Pat. Appl. Publ., 15 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE _____ US 2002042374 20020411 A1 US 1998-76948 19980513

PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 136:304089

US 1997-46373P P 19970513 Too(b) date > lyn.

The present invention relates to a method of treating insulin resistance or syndrome X in a patient. The method includes the step of administering a therapeutically effective amt. of a somatostatin or a somatostatin agonist to said patient. Among examples provided are: binding of several somatostatin agonists to human somatostatin receptors, improvement of insulin sensitivity in BIM-23268-treated fatty Zucker rats, and redn. of hypertriglyceridemia by BIM-23268C in obese Zucker rats.

ΙT 72127-62-9

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (somatostatin and somatostatin agonists in treatment of insulin insensitivity and syndrome X)

L46 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:197431 HCAPLUS

DOCUMENT NUMBER:

136:386384

TITLE:

Human Somatostatin Receptor Specificity of

Backbone-Cyclic Analogues Containing Novel Sulfur

Building Units

AUTHOR(S):

Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

SOURCE:

Journal of Medicinal Chemistry (2002), 45(8),

? Downto Say Cycliptal Posz.

1665-1671

CODEN: JMCMAR; ISSN: 0022-2623

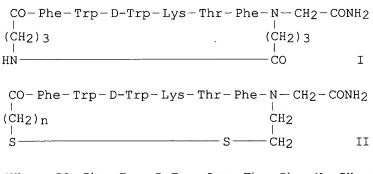
American Chemical Society

PUBLISHER: DOCUMENT TYPE:

LANGUAGE:

GT

Journal English



Somatostatin-14 (somatostatin) and its clin. available analogs AB (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Acm-S-CH2CH2N(Fmoc)CH2CO2H (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

252845-45-7P 252845-47-9P 425428-86-0P IT

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN 2001:560059 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

135:132468

TITLE:

Method of inhibiting fibrosis with a somatostatin or

somatostatin agonist

INVENTOR(S):

Culler, Michael D.; Kasprzyk, Philip G.

PATENT ASSIGNEE(S):

Biomeasure Inc., USA

SOURCE:

U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 705,790,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

3

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6268342	В1	20010731	US 1999-254097	19990510
WO 9808529	A1	19980305	WO 1997-US14154	19970827

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,

UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,

GN, ML, MR, NE, SN, TD, TG 20010802 US 2001011072 Α1

PRIORITY APPLN. INFO.:

US 2001-761605 20010,11,6 B2 19960830 los (b) ade US 1996-705790 WO 1997-US14154 W 19970827

US 1999-254097 A3 19990510

OTHER SOURCE(S):

MARPAT 135:132468

The invention discloses a method of inhibiting fibrosis in a patient. method comprises administering a therapeutically effective amt. of a somatostatin, a somatostatin agonist, or a pharmaceutically acceptable salt thereof, to the patient.

IT 72127-62-9

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(somatostatin or somatostatin agonist for fibrosis inhibition)

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS 15 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1999 811096 HCAPLUS

DOCUMENT NUMBER:

132:50250

TITLE:

Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S): PATENT ASSIGNEE(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

Peptor Ltd., Israel

SOURCE:

PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

10

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.		KI	ND	DATE			A	PPLI	CATI	и ис	o. :	DATE			
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WO 9965	508		A	1	1999	1223		W	0 19	99-I	L329		1999	0615		
` W:	AE,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
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	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,

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TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
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          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6051554
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                                20000105
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                                                                    19990615
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                                                 JP 2000-554387
                                                                    19990615
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                                20020502
                                                 US 2000-734583
                          Α1
                                                                    20001213
                                                               A 19980619
PRIORITY APPLN. INFO.:
                                              US 1998-100360
                                              US 1998-203389
                                                               A 19981202
                                              US 1995-488159
                                                               A2 19950607
                                              US 1995-569042
                                                               A2 19951207
                                              US 1996-690609 A2 19960731
                                              WO 1999-IL329
                                                                 W 19990615
OTHER SOURCE(S):
                            MARPAT 132:50250
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AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

252845-45-7P, PTR 3213 252845-47-9P, PTR 3219 IT252845-48-0P, PTR 3221

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

131:295567

ACCESSION NUMBER: 1999:670109 HCAPLUS

DOCUMENT NUMBER:

TITLE: Inhibition of Helicobacter pylori proliferation

Audet 734583-claim 2 2nd run Kaneko, Hiroshi; Mitsuma, Terunori; Yamashita, Koichi; INVENTOR(S): Morgan, Barry Biomeasure, Inc., USA PATENT ASSIGNEE(S): SOURCE: U.S., 19 pp. CODEN: USXXAM DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. DATE PATENT NO. KIND DATE A US 1998-74117 US 5968903 19991019 19980507 WO 1999-US10058 19990506 19991111 WO 9956769 Α2 WO 9956769 A3 20001109 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,

EP 1999-922851 19990506 Α2 20010214 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI Т2 20020514 JP 2000-546793 19990506 JP 2002513769 NO 2000005588 20010105 NO 2000-5588 20001106 100 (0) A1 1998/05/07 PRIORITY APPLN. INFO.: US 1998-74117 WO 1999-US10058 W 19990506

CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

19991123

MARPAT 131:295567 OTHER SOURCE(S):

A1

The present invention is directed to a method of using somatostatin or a somatostatin agonist to inhibit the proliferation of Helicobacter pylori (H. pylori), which comprises administering to a patient in need thereof an effective amt. of said somatostatin or somatostatin agonist. Preferably, a somatostatin sub-type receptor 2 (SSTR-2) selective somatostatin agonist is administered in a method of this invention. The inhibition of H. pylori proliferation is useful in treating various gastroduodenal diseases such as peptic ulcers, gastric cancer and gastric lymphoma.

IT 72127-62-9

AU 9939754

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibition of Helicobacter pylori proliferation with somatostatin or a somatostatin agonist)

REFERENCE COUNT:

THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AU 1999-39754

19990506

L46 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: (1998:764305 HCAPLUS 130:20992 DOCUMENT NUMBER:

TITLE:

Somatostatin and somatostatin agonists for treating

insulin insensitivity and Syndrome X

INVENTOR(S):

Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt, Matthew V.

PATENT ASSIGNEE(S):

Societe De Conseils De Recherches Et D'Applications

Scientifiques S.A. (S.C., Fr.

SOURCE:

PCT Int. Appl., 55 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

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PATENT NO.
                    KIND DATE
                                                  APPLICATION NO. DATE
                         ____
                                _____
                                                  _____
      WO 9851332 A1 19981119 WO 1998-EP3000 19980513
          W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
               FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
               CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9880198
EP 980253
                         A1 19981208 AU 1998-80198 19980513
A1 20000223 EP 1998-928308 19980513
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, FI
PRIORITY APPLN. INFO.:
                                               US 1997-854943
                                                                      19970513
                                               WO 1998-EP3000
                                                                      19980513
OTHER SOURCE(S):
                           MARPAT 130:20992
     The present invention relates to a method of treating insulin resistance
     or Syndrome X. The method includes the step of administering a
      therapeutically effective amt. of a somatostatin or a somatostatin agonist
      to said patient. The invention also includes pharmaceutical compns.
      comprising a somatostatin or somatostatin agonist and the use of such
     products in the prepn. of such compns.
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
         (somatostatin and somatostatin agonists for treating insulin
         insensitivity and Syndrome X)
REFERENCE COUNT:
                             12
                                    THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
                                    RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L46 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN
                            (1998):764304 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                             T30:20991
                             Somatostatin and somatostatin agonists for decreasing
TITLE:
                             body weight
                                                                                                   Same on 48
INVENTOR(S):
                             Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt,
                             Matthew V.
                             Societe De Conseils De Recherches Et D'Applications
PATENT ASSIGNEE(S):
                             Scientifiques S.A._(S.C., Fr.
SOURCE:
                             PCT Int. Appl., (41 pp)
                                                       less prop,
                             CODEN: PIXXD2
DOCUMENT TYPE:
                             Patent
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PATENT INFORMATION:
     PATENT NO. KIND DATE APPLICATION NO. DATE
WO 9851331 A1 19981119 WO 1998-EP2999 19980513
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
    AU 9876550
                      A1 19981208
                                          AU 1998-76550 19980513
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English

Audet 734583-claim 2 2nd run

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EP 1998-924317 19980513
                               20000301
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
PRIORITY APPLN. INFO.:
                                             US 1997-854941
                                                                   19970513_
                                             WO 1998-EP2999
                                                                   19980513
                            MARPAT 130:20991
OTHER SOURCE(S):
     The present invention relates to a method of decreasing body wt. in a
     patient. The method includes the step of administering a therapeutically
     effective amt. of a somatostatin or a somatostatin agonist to said
     patient. A pharmaceutical/cosmetic compn. comprises the somatostatin or
     somatostatin agonist. Such products are used to prep. such compns. for the redn. of body wt. in a human or mammalian animal.
TΤ
     72127-62-9
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
      (Uses)
         (somatostatin and somatostatin agonists for decreasing body wt.)
REFERENCE COUNT:
                            6
                                   THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                                   RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L46 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN
                           1998:163467 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                            128:226683
TITLE:
                           Method of inhibiting fibrosis with a somatostatin
                           agonist
                           Culler, Michael D.; Kasprzyk, Philip G.
INVENTOR(S):
PATENT ASSIGNEE(S):
                            Biomeasure Incorporated, USA; Culler, Michael D.;
                            Kasprzyk, Philip G.
                            PCT Int. Appl., 61 pp.
SOURCE:
                            CODEN: PIXXD2
DOCUMENT TYPE:
                            Patent
                            English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO. KIND DATE
                                              APPLICATION.NO. DATE
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     WO 9808529
                       A1 19980305
                                               WO 1997-US14154 19970827
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
         PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9741490
                       A1
                               19980319
                                                AU 1997-41490
                                                                   19970827
     AU 726731
                         В2
                               20001116
     EP 938328
                         A1
                               19990901
                                               EP 1997-939392
                                                                 19970827
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
     CN 1229357
                               19990922
                                                CN 1997-197671
                                                                   19970827
                         Α
```

US 1996-705790 A2 19960830 WO 1997-US14154 W 19970827 OTHER SOURCE(S): MARPAT 128:226683

T2

Α

В1

20010116

19990301

20010731

The present invention relates to a method of inhibiting fibrosis in a patient. The method comprises administering a therapeutically effective amt. of a somatostatin, a somatostatin agonist or a pharmaceutically acceptable salt thereof to said patient.

IT 72127-62-9

JP 2001500483

ZA 9707783

PRIORITY APPLN. INFO.:

US 6268342

Cychi ?

JP 1998-511678

US 1999-254097 19990510

ZA 1997-7783

19970827

19970829

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

 $(method\ of\ inhibiting\ fibrosis\ with\ a\ somatostatin\ agonist)$

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L46 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1980:6946 HCAPLUS

DOCUMENT NUMBER:

92:6946

TITLE:

Cyclopeptides

PATENT ASSIGNEE(S):

SOURCE:

AΒ

Ciba-Geigy A.-G., Switz. Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	A	PPLICATION NO.	DATE
JP 54059293	A2	19790512	J:	2 1978-119839	19780928
JP 62018560	B4	19870423			
US 4238481	А	19801209		5 1978-942565	19780915
FI 7802907	A	19790329	F.	1978-2907	19780925
FI 68246	В	19850430			
FI 68246	С	19850812			
DD 140142	С	19800213	DI	1978-208064	19780925
EP 1295	A2	19790404	El	9 1978-100994	19780926
EP 1295	B1	19820317			
EP 1295	A3	19790613			
	DE, FR	, GB, NL, S	SE		
ES 473677	A1	19800516	ES	3 1978-473677	19780926
CA 1111841	A1	19811103	C	A 1978-312129 ·	19780926
IL 55643	A1	19811231	I	1978-55643	19780926
NO 7803268	A	19790329	NO	1978-3268	19780927
NO 148957	В	19831010			
NO 148957	С	19840118			
DK 7804284	A	19790329	DI	(1978-4284	19780927
DK 151034	В	19871012			
DK 151034	С	19880222			
ZA 7805488	A	19790926	ZP	1978-5488	19780927
AU 7840229	A1	19800403	ΑU	J 1978-40229	19780927
AU 523050	В2	19820708			
AT 7806982	A	19820715	A7	1978-6982	19780927
AT 370090	В	19830225			
HU 29669	0	19840228	Н	J 1978-CI1860	19780927
HU 184612	В	19840928			
PRIORITY APPLN. INFO	. :		LU 19	77-78191	19770928
GI					

Protected cyclopeptides I [Phe(R) = ring (un)substituted phenylalanine; R1 = .epsilon.-amino-protecting group, H; R2 = hydroxy-protecting group, H; X

= Asn, bond; X1 = .omega.-aminoalkanecarboxylic acid residue, bond; X2 = .omega.-aminoalkanecarboxylic acid residue, bond; Trp = halo or nitro ring substituted D-, L-tryptophan] were deprotected to give II. Thus, 195 mg I [R = H, R1 = CO2CMe3, R2 = CMe3, X = Asn, X1 = NH(CH2)3CO, X2 = bond, Trp = D-Trp] was treated with 1.5 mL F3CCO2H-H2O-thioglycolic acid (8.9:10:1) at 25.degree. for 90 min to give the corresponding II (no yield given). 72127-62-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

ΙT

L46 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN 1979: 222057 HCAPLUS ACCESSION NUMBER: 90:122057 DOCUMENT NUMBER: Decapeptide analogs of somatostatin TITLE: Immer, Hans U.; Abraham, Nedumparambil A. INVENTOR(S): Ayerst, McKenna and Harrison Ltd., Can. PATENT ASSIGNEE(S): U.S., 10 pp. SOURCE: CODEN: USXXAM DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: APPLICATION NO. PATENT NO. KIND DATE 19770725 19781003 US 1977-818500 Α US 4118380 19770725 US 1977-818500 PRIORITY APPLN. INFO.: GT Cl. 19 LIMITE Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-CH2CH2CO-Lys-Gly-Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-NHCH2CH2 BOC CMe3 CMe3 BOC

CMe 3

III

AB Somatostatin analogs I (X = Gly-Asn, Lys-Gly), useful as inhibitors of the release of growth hormone (GH), were prepd. as therapeutic agents for the management of diabetes and the treatment of acromegaly. Thus, Z-Lys(BOC)-Gly-Phe-Phe-OMe (Z = PhCH2O2C, BOC = Me3CO2C) was Z-deblocked and acylated with Ph3CSCH2CH2CO2H by dicyclohexylcarbodiimide/1-hydroxybenzotriazole to give Ph3CSCH2CH2CO-Lys(BOC)-Gly-Phe-Phe-OMe, which was converted to its hydrazide and coupled to H-Trp-Lys(BOC)-Thr(CMe3)-Phe-Thr(CMe3)-Ser(CMe3)-NHCH2CH2SCPh3 by the azide method to give Ph3CSCH2CH2CO-Lys(BOC)-Gly-Phe-Phe-Trp-Lys(BOC)-Thr(CMe3)-Phe-Thr(CMe3)-Ser(CMe3)-NHCH2CH2SCPh3 (II). II was treated with iodine/MeOH to give Cyclic disulfide III), which was deblocked with HCl to give I (X = Lys-Gly). The-in-vivo activities of I on GH release in rats are similar to that of somatostatin.

IT 69404-85-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and deblocking of)

IT 69404-86-0P 69404-87-1P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

=> =>

=> fil reg

FILE 'REGISTRY' ENTERED AT 15:34:24 ON 21 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 20 JUL 2003 HIGHEST RN 551897-78-0 DICTIONARY FILE UPDATES: 20 JUL 2003 HIGHEST RN 551897-78-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> =>

=> d sqide 145 1-8

L45 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 425428-86-0 REGISTRY

CN Glycinamide, 3-(2-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SOL S

NTE modified (modifications unspecified)

type	100	cation	description
bridge	Gly-2	- Gly-9	covalent bridge
stereo	Ala-1	-	D
stereo	Trp-5	-	D

SEQ 1 AGFWWKTFG

======

HITS AT: 2-8

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C71 H83 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 2-A

HO R Me

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-48-0 REGISTRY

CN Glycinamide, 3-(1-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3221

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	lo	cation	description
bridge	Gly-2	- Gly-9	covalent bridge
stereo	Ala-1	-	D
stereo	Trp-5	-	D

SEQ 1 AGFWWKTFG

======

HITS AT: 2-8

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C71 H83 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-B

PAGE 1-C

PAGE 2-A

3 REFERENCES IN FILE CA (1947 TO DATE) 3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN

252845-47-9 REGISTRY

Glycinamide, D-phenylalanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-CN L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2mercaptoethyl) -, cyclic (2.fwdarw.9) -disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

PTR 3219 CN

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL 9 NTE modified (modifications unspecified)

type	·	location	description
bridge stereo stereo	Gly-2 Phe-1 Trp-5	- Gly-9 - -	covalent bridge D D

SEQ 1 FGFWWKTFG

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HITS AT: 2-8

MF C67 H81 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A

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PAGE 1-B

PAGE 1-C

` Ph -NH2 4 REFERENCES IN FILE CA (1947 TO DATE) 4 REFERENCES IN FILE CAPLUS (1947 TO DATE) L45 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN RN 252845-45-7 REGISTRY Glycinamide, N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-Dtryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME) OTHER NAMES: PTR 3213 CN FS PROTEIN SEQUENCE; STEREOSEARCH SOL 8 NTE modified (modifications unspecified) type ----- location ----- description ----bridge Gly-1 - Gly-8 covalent bridge stereo Trp-4 - D SEQ 1 GFWWKTFG HITS AT: 1-7 MF C58 H72 N12 O9 S2 SR CA STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC

Absolute stereochemistry.

PAGE 1-A

0=

PAGE 1-B

Ho Me

$$H_{2N}$$
 CH_{2}
 H_{2N}
 H_{2N}

PAGE 1-C

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_NH2
              4 REFERENCES IN FILE CA (1947 TO DATE)
              4 REFERENCES IN FILE CAPLUS (1947 TO DATE)
L45 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
    72127-62-9 REGISTRY
RN
    Cyclo(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-
CN
    threonyl-L-phenylalanyl) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    1,4,7,10,13,16,19-Heptaazacycloheneicosane, cyclic peptide deriv.
    Cyclic(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-
CN
     threonyl-L-phenylalanyl)
OTHER NAMES:
   84: PN: US20020042374 PAGE: 10 claimed protein
CN
    88: PN: US6268342 SEQID: 94 claimed protein
CN
     PROTEIN SEQUENCE; STEREOSEARCH
FS
SQL
    7
NTE cyclic
PATENT ANNOTATIONS (PNTE):
Sequence | Patent
Source
       Reference
Not Given|US2002042374
         |claimed PAGE
         110
         |US6268342
         |claimed
         |SEQID 94
         1 GFFWKTF
SEQ
HITS AT:
           1-7
     C50 H59 N9 O8
MF
                  CA, CAPLUS, TOXCENTER, USPATFULL
LC
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Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

8 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

8 REFERENCES IN FILE CAPLUS (1947 TO DATE)

ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN L45 69404-87-1 REGISTRY RN L-Serinamide, N2-(3-mercapto-1-oxopropyl)-L-lysylglycyl-L-CN phenylalanyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-threonyl-N-(2-mercaptoethyl)-, cyclic (1-fwdarw.10)-disulfide) acetate (CA INDEX NAME) (salt) (9CI) Ø > 415,06 OTHER CA INDEX NAMES: 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-CN undecaazacyclooctatriacontane, cyclic peptide deriv. PROTEIN SEQUENCE; STEREOSEARCH FS 10 SQL NTEcyclic modified (modifications unspecified)

type ----- location ----- description
uncommon Oaa-10 - -

SEQ 1 GFFWKTFTSX /0

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C68 H92 N14 O14 S2 . x C2 H4 O2

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

CM 1

CRN 69404-86-0

CMF C68 H92 N14 O14 S2

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

disilful

CM 2

CRN 64-19-7 CMF C2 H4 O2

HO-C-CH3

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L45 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 69404-86-0 REGISTRY

CN L-Serinamide, N2-(3-mercapto-1-oxopropyl)-L-lysylglycyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-threonyl-N-(2-mercaptoethyl)-, cyclic (1.fwdarw.10)-disulfide (9CI)

(CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane, cyclic peptide deriv.

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 10

NTE cyclic

type	location	description
		

uncommon

Oaa-10

SEQ

1 GFFWKTFTSX

======

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C68 H92 N14 O14 S2

CI COM

LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

Absolute stereochemistry.

PAGE 1-A

> 4.15,00 B Non-cycl. A.A.

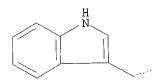
PAGE 1-B

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

Audet 734583-claim 2 2nd run

L45 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN 69404-85-9 REGISTRY RN L-Serinamide, N6-[(1,1-dimethylethoxy)carbonyl]-N2-(3-mercapto-1-CN oxopropyl)-L-lysylglycyl-L-phenylalanyl-L-phenylalanyl-L-tryptophyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-Lphenylalanyl-0-(1,1-dimethylethyl)-L-threonyl-0-(1,1-dimethylethyl)-N-(2mercaptoethyl) -, cyclic (1.fwdarw.10) -disulfide (9CI) NAME) OTHER CA INDEX NAMES: 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-CN undecaazacyclooctatriacontane, cyclic peptide deriv. PROTEIN SEQUENCE; STEREOSEARCH FS SQL 10 cyclic NTEmodified (modifications unspecified) _____ ----- location ----- description type _____ uncommon Oaa-10 -1 GFFWKTFTSX SEQ ====== 1-7 HITS AT: **RELATED SEQUENCES AVAILABLE WITH SEQLINK** C90 H132 N14 O18 S2 STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL Absolute stereochemistry.

PAGE 1-A



t-Bu0

PAGE 1-B

- 1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 15:47:00 ON 21 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 21 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 20 Jul 2003 (20030720/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d stat que 154
          5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?
           126 SEA FILE=REGISTRY ABB=ON PLU=ON [G'BAL''DAB''ACA'][FY].WK[TG'
L5
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               ABU'SCVAF][FA'NLE'C]/SQSP
             8 SEA FILE=REGISTRY ABB=ON PLU=ON L44 AND CYCL?
L45
            13 SEA FILE=HCAPLUS ABB=ON PLU=ON L45
          3119 SEA FILE=REGISTRY ABB=ON PLU=ON [FY].WK[TG'ABU'SCVAF][FA'NLE'
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               C]./SQSP
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               OR BUTAN? OR BUTYRI? OR CARBOXYPROPYL? OR AMINALON OR BABALLON
L50
               OR GAMAREX OR GAMMALON? OR GAMMASOL OR MIELOGEN OR
               MIELOMADE OR PIPERIDI?)
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              8 SEA FILE=REGISTRY ABB=ON PLU=ON L51 OR L49
L51
L52
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L54
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=>
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=> d ibib abs hitrn 154 1-5

=>

```
L54 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
```

2002:615640 HCAPLUS ACCESSION NUMBER:

137:165559 DOCUMENT NUMBER:

Backbone cyclized radiolabelled somatostatin analogs Bonasera, Thomas A.; Livnah, Nurit; Yechezkel, Tamar; TTTTE:INVENTOR(S): Salitra, Yoseph

Peptor Ltd., Israel PATENT ASSIGNEE(S): PCT Int. Appl., 104 pp. SOURCE: CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO.
       PATENT NO.
                                 KIND DATE
                                                                    _____
                                 ____
                                                            WO 2002-IL91
                                                                                                20020204
                                  A2 20020815
       WO 2002062819
              W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                    CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
                     TJ, TM
              RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
                     BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                                IL 2001-141276 A <u>200102</u>05
PRIORITY APPLN. INFO.:
```

OTHER SOURCE(S): MARPAT 137:165559

Novel radiodiagnostic and radiotherapeutic peptides which are conformationally constrained backbone cyclized somatostatin analogs, having improved somatostatin receptor subtype affinity and selectivity are disclosed. The backbone cyclized peptide analogs disclosed posses unique and superior properties over other analogs, such as chem. and metabolic stability, selectivity, increased bioavailability and improved pharmacokinetics. Furthermore, the unique patterns of receptor subtype selectivity provide compds. having improved diagnostic and therapeutic utilities. Pharmaceutical compns. comprising the backbone cyclized somatostatin analogs and radiolabeled analogs, reagents for synthesizing same, and methods of using such compns. for radiodiagnostic and radiotherapeutic purposes are also disclosed.

IT 446311-68-8P 446311-74-6P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (backbone cyclized radiolabeled somatostatin analogs as potential imaging and therapeutic agents)

L54 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1998:446946 HCAPLUS

DOCUMENT NUMBER:

129:203232

TITLE:

Novel Solid-Phase Reagents for Facile Formation of Intramolecular Disulfide Bridges in Peptides under

Mild Conditions

AUTHOR(S):

Annis, Ioana; Chen, Lin; Barany, George

CORPORATE SOURCE:

Department of Chemistry, University of Minnesota,

Minneapolis, MN, 55455, USA

SOURCE:

Journal of the American Chemical Society (1998),

120(29), 7226-7238

CODEN: JACSAT; ISSN: 0002-7863

American Chemical Society

PUBLISHER: DOCUMENT TYPE:

Journal

DOCUMENT TIEB.

English

AB The controlled formation of intramol. disulfide bridges in peptides, while avoiding unwanted oligomerization, is a significant challenge. Ellman's reagent, 5,5'-dithiobis(2-nitrobenzoic acid), was developed originally in the context of an assay for measuring free thiol concn. under physiol. conditions. The present studies demonstrate that this reagent, when bound through two sites to a suitable solid support (PEG-PS, modified Sephadex, or controlled-pore glass), is an effective mild oxidizing reagent that promotes the formation of disulfide bridges! Rates and yields of the reactions were detd. as a function of pH, excess of oxidizing reagent, resin loading, and parent support, for the prepn. of oxytocin and

OF

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deamino-oxytocin (9 residues, disulfide bridge between residues 1 and 6),
somatostatin (14 residues, disulfide bridge between residues 3 and 14),
.alpha.-conotoxin SI (13 residues, disulfide bridges between residues 2
and 7; 3 and 13), and apamin (18 residues, disulfide bridges between
residues 1 and 11; 3 and 15). Cystine dimers of these peptide models
formed, if at all, in relatively low amts. Use of solid-phase Ellman's
reagents to oxidize the linear precursors of conotoxin or apamin
(tetrathiols) gave as the main products the correctly paired regioisomers.
Particular advantages of the overall approach include fast reaction rates
over a wide range of pH from 2.7 to 6.6, easy purifn. of disulfide-contg.
products, and the specificity and reusability of the reagents.
212136-51-1P
```

RL: SPN (Synthetic preparation); PREP (Preparation)

(solid-phase reagents for facile formation of intramol. disulfide

bridges in peptides)

THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS 77 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L54 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

1994:293143 HCAPLUS ACCESSION NUMBER:

120:293143 DOCUMENT NUMBER:

Radioactively-labeled somatostatin-derived peptides TITLE:

for imaging and therapeutic uses

Dean, Richard T.; Lister-James, John INVENTOR(S):

Diatech, Inc., USA PCT Int. Appl., 36 pp. PATENT ASSIGNEE(S):

SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE: English LANGUAGE:

44 FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

TT

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 9400489 WO 9400489	A2 19940106 A3 19940331	WO 1993-US6029	19930623
RW: AT, BE, US 5716596 AU 9347688 AU 690071	JP, KR, US CH, DE, DK, ES, FR, A 19980210 A1 19940124 B2 19980423 A1 19950426	US 1992-902935 AU 1993-47688	19930623
7 7 D D	B1 20010801 CH, DE, DK, ES, FR, T2 19960430 A2 20010425 A3 20020109	GB, IT, LI, NL, SE JP 1994-502568 EP 2000-122243	19930623 19930623
R: AT, BE, AT 203754 ES 2164667 CA 2138647 ZA 9307596 AU 9470990 AU 701083 EP 720621	CH, DE, DK, ES, FR, E 20010815 T3 20020301 C 20021112 A 19940804 A1 19950117 B2 19990121 A1 19960710 B1 20010207	AT 1993-918129 ES 1993-918129 CA 1993-2138647 ZA 1993-7596 AU 1994-70990 EP 1994-920076	19930623 19930623 19930623 19931013 19940603
R: AT, BE, AT 199089 EP 1092726 EP 1092726	CH, DE, DK, ES, FR, E 20010215 A2 20010418 A3 20020109	AT 1994-9200/6 EP 2000-122241	19940603 19940603
EP 1099707 EP 1099707	A2 20010516 A3 20020109	EP 2000-122242	19940003

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE
     ES 2158897
                                           ES 1994-920076
                                                             19940603
                       Т3
                            20010916
     ZA 9404498
                                           ZA 1994-4498
                                                             19940623
                       Α
                            19960624
     US 5871711
                                           US 1995-347397 '
                                                             19950113
                       Α
                            19990216
                                           US 1995-465764
     US 5814298
                       Α
                            19980929
                                                             19950606
                                           US 1995-466100
                                                             19950606
     US 5820845
                       Α
                            19981013
                                           US 1995-470932
                                                             19950606
     US 5833942
                       Α
                            19981110
                                                             19950606
                            19981201
                                           US 1995-467025
     US 5843401
                       Α
                                                             19980723
     AU 9877481
                            19981001
                                           AU 1998-77481
                       Α1
                                                         A2 19920623
PRIORITY APPLN. INFO .:
                                        US 1992-902935
                                                         A3 19930623
                                        EP 1993-918129
                                                         A 19930623
                                        WO 1993-US6029
                                        US 1993-92355
                                                         A 19930715
                                        EP 1994-920076
                                                         Α
                                                             19940603
                                        WO 1994-US6274
                                                            19940603
                         MARPAT 120:293143
OTHER SOURCE(S):
     Peptide derivs. and analogs of somatostatin, and embodiments of such
     peptides labeled with 99mTc, 186Re, or 188Re are presented, as well as
     methods and kits for making, radiolabeling and using such peptides for
     imaging or therapy in a mammalian body. CH2CO FFWDKTFCCAcmGCAcmamide (I)
     was prepd. by solid phase peptide synthesis and radiolabeled with 99mTc.
     I inhibited binding of [125I-Tyr11] somatostatin-14 to AR42J rat pancreatic
     tumor cell membrane somatostatin receptors with a Ki = 0.16 nM.
     154887-73-7DP, Tc-99 labeled
TΤ
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of)
     154887-73-7P 154935-66-7DP, Tc-99 labeled
ΙT
     154935-66-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as somatostatin analog, for radiolabeling for scintigraphic
        imaging and therapy)
L54 ANSWER 4 OF 5
                    HCAPLUS COPYRIGHT 2003 ACS on STN
                         1985:160548 HCAPLUS
ACCESSION NUMBER:
                         <del>102:</del>160548
DOCUMENT NUMBER:
                         Partial retro-inverso analogs of somatostatin:
TITLE:
                         pairwise modifications at residues 7 and 8 and at
                         residues 8 and 9
                         Pallai, P. V.; Struthers, R. S.; Goodman, Murray;
AUTHOR(S):
                         Moroder, L.; Wunsch, E.
                         Dep. Chem., Univ. California, La Jolla, CA, 92093, USA
CORPORATE SOURCE:
                         Biochemistry (1985), 24(8), 1933-41
SOURCE:
                         CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Peptide bonds between residues 7 and 8 and residues 8 and 9, postulated
     internal cleavage sites of the peptide hormone somatostatin, were
     subjected to pairwise retro-inverso modification, where atoms of these
     peptide bonds were interchanged to give the analogs [gPhe7-m-(RS)-
     Trp8] somatostatin (I) and [gTrp8-m-(RS)-Lys9] somatostatin (II). Key
     fragments contg. the modifications were synthesized by using
     [bis(trifluoroacetoxy)iodo]benzene [2712-78-9] for the generation of
     gem-diaminoalkyl-contg. precursors from peptide amides. The versatility
     of soln. synthetic methods was utilized to allow the incorporation of the
     modified segments. Protecting groups, removable selectively and under
     mild conditions, included tert-butyl-based groups for the side chains and
     tert-butylmercapto group for the cysteine thiols. The excellent results
```

95388-77-5P

TT

obtained in the syntheses of I and II suggest the general feasibility of this route for the synthesis of centrally modified analogs. The purifn.

of the products by Sephadex LH-20 chromatog. afforded the sepn. of diastereomers of both analogs. The two isomers of I showed significant but different activities whereas those of II were marginally active.

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and cyclization of)

L54 ANSWER 5 OF 5 HCAPLUS_COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

4980:639948 HCAPLUS

DOCUMENT NUMBER:

93:239948

TITLE:

Somatostatin analogs___

INVENTOR(S):

(Sarantakis) Dimitrios

PATENT ASSIGNEE(S):

American Home Products Corp., USA

SOURCE:

U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

AΒ

1

PATENT INFORMATION:

KIND DATE _____ APPLICATION NO. _____

PATENT NO. US 4215.039 A

19800729

US 1979-12430 US 1979-12430

19790215

-From 1⁵¹ search
Diff. from other seath
Nort as strong - Gr w?

- Sand Getween?

PRIORITY APPLN. INFO.: For diagram(s), see printed CA Issue.

Somatostatin analogs I [R = H, alkanoyl, Bz, H-Ala-Gly, H-Ala-D-Ala, H-Gly-Gly-Gly; X = Arg, His, Lys; X1 = His, Tyr, Glu; X2 = Trp, D-Trp; X3 = Val, HNCHEtCO (Abu), Leu, Phe, Tyr; R1 = H, CO2H; the configuration atCHR1 can be D or L] and their deamino analogs were prepd. as agents for suppressing release of growth hormone (GH) and glucagon without substantially decreasing insulin. Thus, Me3CO2C-Cys(MBzl)-Arg(Tos)-His (Tos) -Phe-Phe-D-Trp-Lys (CO2CH2C6H4Cl-2) -Val-Phe-Thr (CH2Ph) -Ser (CH2Ph) -Cys(MBzl)-OCH2-resin (MBzl = CH2C6H4OMe-p, Tos = tosyl) was prepd. by the solid-phase method and then it was resin-cleaved and deblocked by HF/anisole to give the linear peptide, which was cyclized by oxide with K3Fe(CN)6 to give somatostatin II (X4 = His, X5 = Val) (III). II (X4 =

Glu, X5 = Abu) was also prepd. by the solid-phase method. III at 200 .mu.g/mL (i.p.) lowered the blood levels of GH and glucagon in rats from 407 ng/mL and 45 pg/mL, resp., to 119 ng/mL and 22 pg/mL, resp., whereas the above dose of III lowered blood levels of insulin in rats from 271 .mu.g/mL to 191 .mu.g/mL.

75691-47-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and inhibition of release of growth hormone and glucagon by)

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=> fil reg FILE 'REGISTRY' ENTERED AT 15:47:44 ON 21 JUL 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

HIGHEST RN 551897-78-0 20 JUL 2003 STRUCTURE FILE UPDATES: 20 JUL 2003 HIGHEST RN 551897-78-0 DICTIONARY FILE UPDATES:

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Page 30

Audet 734583-claim 2 2nd run

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf
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=> d sqide 152 1-8
L52 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN
    446311-74-6 REGISTRY
    Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-
CN
    .kappa.N-glycyl-.kappa.N-5-aminopentanoyl-(2S)-2,4-diaminobutanoyl-L-
    phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-
    N2-(3-carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-,
    hydrogen, (SP-5-24) - (9CI) (CA INDEX NAME)
    PROTEIN SEQUENCE
FS
SQL 12
NTE metal complex
    modified (modifications unspecified)
type ----- location ----- description
bridge Dab-5 - Gly-12 covalent bridge uncommon Oaa-4 - - - - - - - - - - - stereo Trp-8 - D
   ._____
```

SEQ 1 GGGXXFWWKT FG

HITS AT: 6-12

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C73 H91 N17 O16 Re S . H

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A

PAGE 2-A

PAGE 3-A

₽+

- 1 REFERENCES IN FILE CA (1947 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)
- L52 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN RN 446311-68-8 REGISTRY

Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[(mercapto-CN .kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-5-aminopentanoyl-(2S)-2,4diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-Lthreonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE FS

SQL 10

metal complex NTE

modified (modifications unspecified)

type	lo		description	
bridge	 Dab-3	- Gly-10	covalent bridge	
uncommon	Oaa-2	-	_	
uncommon stereo	Dab-3 Trp-6	-	_ D	

1 AXXFWWKTFG SEQ

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C72 H90 N16 O15 Re S2 . H MF

CI CCS

SR CA

LC

STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 212136-51-1 REGISTRY

CN 7-20-Somatostatin-20 (swine reduced), 9-[(2S)-2-aminobutanoic acid]-20-L-alanine- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 14

NTE

type ----- location ----- description
uncommon Abu-3 - -

SEQ 1 AGXKNFFWKT FTSA

HITS AT: 6-12

MF C77 H108 N18 O19

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-A

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 204388-03-4 REGISTRY
CN Cyclo(L-asparaginyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-5-aminopentanoyl) (9CI) (CA INDEX NAME)

Audet 734583-claim 2 2nd run

OTHER NAMES: CN FŞ PR SQL 8 NTE cyclic

CN 80: PN: US20020042374 PAGE: 10 claimed protein 84: PN: US6268342 SEQID: 90 claimed protein

PROTEIN SEQUENCE; STEREOSEARCH

______ ----- location ----- description

uncommon Oaa-8 - -

PATENT ANNOTATIONS (PNTE):

Sequence | Patent Source | Reference =======+=========== Not Given|US2002042374 |claimed PAGE 110 _____ |US6268342 |claimed

|SEQID 90

. ======

1 NFFWKTFX SEQ

2-8 HITS AT:

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C57 H71 N11 O10 MF

SR CA

CA, CAPLUS, TOXCENTER, USPATFULL LC STN Files:

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

Ph

PAGE 2-B

PAGE 2-C

=0

__ Me

7 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

7 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154935-66-7 REGISTRY

CN L-Cysteinamide, N-(bromoacetyl)-L-phenylalanyl-L-phenylalanyl-Dtryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-mercapto-2-methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL '

NTE modified (modifications unspecified)

SEQ 1 FFWKTFC

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C68 H97 Br N12 O9 S3

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 154887-73-7 REGISTRY

CN

L-Cysteinamide, N-(chloroacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-mercapto-2-methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)-

(9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL 7

NTE modified (modifications unspecified)

----- location ----undetermined modification modification Phe-1

1 FFWKTFC SEQ

1-7 HITS AT:

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C68 H97 Cl N12 O9 S3 MF

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SR CA

LC

STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

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SH (CH<sub>2</sub>) 5
NH<sub>2</sub>
NH<sub>3</sub> Me
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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2003 ACS on STN

RN 95388-77-5 REGISTRY

CN Somatostatin (sheep reduced), 8-de-L-tryptophan-9-[2-(4-aminobutyl)-N-[1-amino-2-(1H-indol-3-yl)ethyl]-3-oxo-.beta.-alanine]-, (S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Somatostatin (sheep reduced), 8-de-L-tryptophan-9-[DL-2-(4-aminobutyl)-N-[1-amino-2-(1H-indol-3-yl)ethyl]-3-oxo-.beta.-alanine]-, (S)-

FS PROTEIN SEQUENCE

SQL 14

NTE

type .	lo	 ocation	description
stereo replacement replacement	Lys-9 Trp-8 Lys-9	- -	DL aza carba
			

SEQ 1 AGCKNFFWKT FTSC

==

HITS AT: 6-12

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C76 H106 N18 O19 S2

LC STN Files: CA, CAPLUS

PAGE 1-B

PAGE 2-B

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

L52 ANSWER 8 OF 8) REGISTRY COPYRIGHT 2003 ACS on STN

RN 75691-47-3 REGISTRY

CN Somatostatin (sheep), 1-de-L-alanine-2-deglycine-4-L-arginine-5-L-

glutamic acid-8-D-tryptophan-10-(L-2-aminobutanoic acid)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-undecaazacyclooctatriacontane, cyclic peptide deriv.

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 12

NTE

type	location		description	
bridge uncommon	Cys-1 Abu-8	- Cys-12	disulfide bridge -	

SEQ 1 CREFFWKXFT SC

======

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

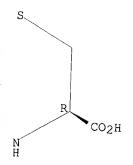
MF C72 H97 N17 O17 S2

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-B

PAGE 1-C



- 1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

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FILE COVERS 1907 - 21 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 20 Jul 2003 (20030720/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE 921 SEA FILE=REGISTRY SUB=L2 SSS FUL L3 L45224 SEA FILE=REGISTRY ABB=ON .PLU=ON SOMATO? L5817 SEA FILE=REGISTRY ABB=ON PLU=ON (L1 OR L4) AND L5 L6 5681 SEA FILE=REGISTRY ABB=ON PLU=ON (L1 OR L2) AND BRIDGE/NTE L7 L8. 361 SEA FILE=REGISTRY ABB=ON PLU=ON L6 AND L7 L15 STR C @7 N @8 0 @ 9 0 G1⊘C⊘G2⊘G4⊘N

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REP G4 = (1-5) CH2
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        IS R
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DEFAULT ECLEVEL IS LIMITED
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NUMBER OF NODES IS
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                        C @ 7
                                          0 @ 9
    0
G1⊘C⊘G2⊘G4⊘N
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REP G2=(0-1) S
REP G4 = (1-5) \cdot CH2
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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L20
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=> d ibib abs hitrn hitseq 1-22
L20 ANSWER 1 OF 22
                     HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                          2002:232937 HCAPLUS
DOCUMENT NUMBER:
                          137:76086
                          Identification and characterization of a type
TITLE:
                          five-like somatostatin receptor in goldfish pituitary
                          Lin, Xinwei; Nunn, Caroline; Hoyer, Daniel; Rivier,
AUTHOR(S):
                          Jean; Peter, Richard E.
                          Department of Biological Sciences, University of
CORPORATE SOURCE:
                          Alberta, Edmonton, AB, T6G 2E9, Can.
                          Molecular and Cellular Endocrinology (2002), 189(1-2),
SOURCE:
                          105-116
                          CODEN: MCEND6; ISSN: 0303-7207
```

Elsevier Science Ireland Ltd.

PUBLISHER:

Audet 734583-claim 2

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB

SEQ

A somatostatin receptor (Sst) cDNA was cloned and sequenced from goldfish pituitary. The cDNA encodes a 390-amino acid type 5-like Sst (designated as gfSst5). The amino acid sequence of the receptor has slightly higher homol. to mammalian Sst5', compared with other mammalian Sst subtypes and recently identified fish Sst1, Sst2, and Sst3. In CCL39-SRE-Luci cells stably expressing the cloned receptor, agonist radioligand [1251]LTT-SRIF28', a mammalian SRIF28 analog, bound to a homogenous population of receptors with high affinity (nM Kd). Competition binding studies showed that all 3 natural goldfish SRIF ligands, SRIF14, [Pro2]SRIF14, and goldfish SRIF28 (gfSRIF28), and LTT-SRIF28 bind the cloned gfSst5 with high affinity and significantly stimulate [35S]GTP.gamma.S binding, with SRIF28 peptides showing higher affinity in receptor binding and potency in [35S]GTP.gamma.S binding compared with SRIF14 peptides. The receptor gene is highly and predominately expressed in pituitary; lower levels of the receptor mRNA were also detected in different brain regions by reverse transcriptor-polymerase chain reaction

(RT-PCR) followed by Southern blot anal. IT **421545-91-7**, Goldfish somatostatin-28

RL: BSU (Biological study, unclassified); BIOL (Biological study) (identification and characterization of a type five-like somatostatin receptor in goldfish pituitary)

IT **421545-91-7**, Goldfish somatostatin-28

RL: BSU (Biological study, unclassified); BIOL (Biological study) (identification and characterization of a type five-like somatostatin receptor in goldfish pituitary)

RN 421545-91-7 HCAPLUS

CN L-Cysteine, L-seryl-L-alanyl-L-alpha.-glutamyl-L-seryl-L-seryl-L-asparaginyl-L-glutaminyl-L-leucyl-L-prolyl-L-threonyl-L-arginyl-L-valyl-L-arginyl-L-lysyl-L-asparaginyl-L-phenylalanyl-L-tryptophyl-L-lysylglycyl-L-phenylalanyl-L-threonyl-L-seryl-, cyclic (17.fwdarw.28)-disulfide (9CI) (CA INDEX NAME)

1 SAESSNQLPT RVRKEGCKNF YWKGFTSC

PAGE 1-A

PAGE 1-B

PAGE 2-A

PAGE 3-A

PAGE 3-B $CH - (CH_2)_3 - NH$ NH NH C = 0СН-СН-Ме NH OH = 0

PAGE 4-A

CH2-Ph

REFERENCE COUNT:

THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

46

ACCESSION NUMBER:

2002:135340 HCAPLUS

DOCUMENT NUMBER:

136:352826

TITLE:

Pharmacological characterization of the goldfish

somatostatin sst5 receptor

AUTHOR(S):

Nunn, Caroline; Feuerbach, Dominik; Lin, Xinwei;

Peter, Richard; Hoyer, Daniel

CORPORATE SOURCE:

Novartis Pharma AG, Nervous System Research, Basel,

CH-4002, Switz.

SOURCE:

European Journal of Pharmacology (2002), 436(3),

173-186

CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE:

Journal LANGUAGE: English

Somatostatin (somatotropin release inhibiting factor, SRIF), exerts its effects via specific G protein coupled receptors of which five subtypes have been cloned (sst1-5). Recently, SRIF receptors have also been cloned from fish tissues. In this study, goldfish sst5 receptors (gfsst5) were expressed and characterized in the Chinese hamster lung fibroblast cell line, that harbors the luciferase reporter gene driven by the serum responsive element (CCL39-SRE-Luci). The agonist radioligands [1251]-LTT-SRIF-28 ([Leu8, D-Trp22, 1251-Tyr25]SRIF-28) and [125I][Tyr10]cortistatin-14 labeled similar receptor densities with high affinity and in a saturable manner (pKd: 9.99-9.71; Bmax: 300-350 fmol/mg). 5'-Guanylyl-imidodiphosphate inhibited radioligand binding to some degree (38.5-57.9%). In competition binding studies, the pharmacol. profile of SRIF binding sites defined with [1251]LTT-SRIF-28 and [125I] [Tyr10] cortistatin-14 correlated significantly (R2 = 0.97).

Audet 734583-claim 2

Pharmacol. profiles of human and mouse sst5 receptors expressed in CCL39 cells correlated markedly less with those of the gfsst5 profile (R2 = 0.52-0.78). Functional expression of the qfsst5 receptor was examd. by measurement of agonist-induced luciferase expression and stimulation of [35S]GTP.gamma.S binding. Profiles were similar to those achieved in radioligand binding studies (R2 = 0.81-0.93), although relative potency (pEC50) was reduced compared to pKd values. Relative efficacy profiles of luciferase expression and [35S]GTP.gamma.S binding, were rather divergent (R2 = 0.48) with peptides showing full agonism at one pathway and absence of agonism at the other. BIM 23056 (D-Phe-Phe-Tyr-D-Trp-Lys-Val-Phe-D-Nal-NH2) acted as an antagonist on the effects of SRIF-14 (pKB= 6.74) on stimulation of [35S]GTP.gamma.S binding. Pertussis toxin abolished the effect of SRIF-14 on luciferase expression and [35S]GTP.gamma.S binding suggesting coupling of the receptor to Gi/Go proteins. In summary, the present studies demonstrate that the gfsst5 receptor has a similar pharmacol. profile and transductional properties to mammalian sst5 receptors. The difference in efficacy profiles defined using different functional assays suggests numerous, agonist specific, conformational receptor states, and/or ligand-dependent receptor trafficking.

IT 421545-91-7

RL: BSU (Biological study, unclassified); BIOL (Biological study) (pharmacol. characterization of goldfish somatostatin sst5 receptor)

IT **421545-91-7**

CN

SEQ

RL: BSU (Biological study, unclassified); BIOL (Biological study) (pharmacol. characterization of goldfish somatostatin sst5 receptor)

RN 421545-91-7 HCAPLUS

L-Cysteine, L-seryl-L-alanyl-L-.alpha.-glutamyl-L-seryl-L-seryl-L-asparaginyl-L-glutaminyl-L-leucyl-L-prolyl-L-threonyl-L-arginyl-L-valyl-L-arginyl-L-lysyl-L-asparaginyl-L-phenylalanyl-L-tyrosyl-L-tryptophyl-L-lysylglycyl-L-phenylalanyl-L-threonyl-L-seryl-, cyclic (17.fwdarw.28)-disulfide (9CI) (CA INDEX NAME)

1 SAESSNQLPT RVRKEGCKNF YWKGFTSC

PAGE 1-A

PAGE 1-B

PAGE 2-A

PAGE 3-A

PAGE 3-B

PAGE 4-A

R CH2-Ph

THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS 73 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1988:147444 HCAPLUS

DOCUMENT NUMBER:

108:147444

TITLE:

Prosomatostatin processing in anglerfish brain, gut

and pancreas

AUTHOR(S):

Morel, Alain; Kuks, Paul F. M.; Bourdais, Julie;

Cohen, Paul

CORPORATE SOURCE:

Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie

Curie, Paris, 75006, Fr.

SOURCE:

Biochemical and Biophysical Research Communications

(1988), 151(1), 347-54

CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The distribution of somatostatin immunoreactive forms in 3 tissues of the anglerfish (Lophius piscatorius) was analyzed by a combination of gel permeation, HPLC, and amino acid anal. Prosomatostatins I and II were expressed in both neural and gastrointestinal tissues, and their posttranslational processing gave rise to somatostatin-14 I, somatostatin-28 II, and some of its 23-hydroxylysine deriv. In contrast to mammals, prodn. of 2 somatostatins in teleosts requires 2 structurally distinct precursors whose processing operates in a fixed rather than in a tissue-specific manner.

93460-56-1 TΤ

RL: FORM (Formation, nonpreparative)

(formation of, by organs of anglerfish)

93460-56-1 IT

RL: FORM (Formation, nonpreparative)

(formation of, by organs of anglerfish)

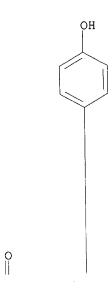
93460-56-1 HCAPLUS RN

Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-CN (9CI) (CA INDEX NAME)

1 SVDSTNNLPP RERKAGCKNF YWKGFTSC SEQ

Absolute stereochemistry.

PAGE 1-A



PAGE 1-C

PAGE 1-D

PAGE 2-B

HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 4 OF 22

1987:631706 HCAPLUS ACCESSION NUMBER:

107:231706 DOCUMENT NUMBER:

TITLE:

Post-translational processing of preprosomatostatin-II examined using fast atom bombardment mass spectrometry

Andrews, P. C.; Nichols, R.; Dixon, Jack E.

AUTHOR(S): Dep. Biochem., Purdue Univ., West Lafayette, IN, CORPORATE SOURCE:

47907, USA

Journal of Biological Chemistry (1987), 262(26), SOURCE:

12692-9

CODEN: JBCHA3; ISSN: 0021-9258

Journal DOCUMENT TYPE: LANGUAGE:

AΒ

English The products and an intermediate of preprosomatostatin-II processing in the anglerfish islet were purified and subjected to structural anal. The peptides isolated identify the site of signal cleavage (between serine and glutamine). The prohormone is further processed at arginine in position 97 and, to a lesser extent, at the 2 adjacent basic amino acid residues lysine and arginine in positions 61 and 62, resp. A 28-residue somatostatin was also generated which can be hydroxylated at lysine in position 23. A proteolytic processing site which would form the 14-residue somatostatin does not appear to be used to a significant degree. Fast-atom bombardment mass spectrometry (FABMS) was used to demonstrate that the N-terminal residues of peptides 25-60, and 25-90 are pyroglutamic acid, a modification which precludes Edman degrdn. of these peptides. Anal. of the peptides and tryptic peptides maps by FABMS allowed confirmation of the sites of prohormone conversion and indicated that terminal basic residues were removed during processing. Three amino acid residues were also found to differ from the amino acid sequence deduced from the cDNA and were localized to specific regions by FABMS anal. Residues found to differ from the cDNA (cDNA in parentheses) were: aspartate-77 (threonine), valine-78 (phenylalanine), and glycine-9 (glutamate). Mass assignments were confirmed by running a single cycle of Edman degrdn. prior to FABMS. The peptides noted above were also examd. by Edman sequence anal. The sequence of a cDNA clone to preprosomatostatin-II was re-examd. in light of the obsd. differences at the protein level. This study emphasizes the utility of FABMS in prohormone processing studies and in identification of posttranslational processing events.

IT 93460-56-1

RL: PRP (Properties)

(amino acid sequence of, of pancreas islet of anglerfish)

IT 93460-56-1

RL: PRP (Properties)

(amino acid sequence of, of pancreas islet of anglerfish)

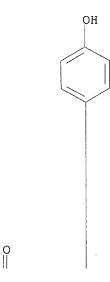
RN 93460-56-1 HCAPLUS

CN Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME)

SEQ 1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

Absolute stereochemistry.

PAGE 1-A



PAGE 1-C

PAGE 1-D

PAGE 2-B

L20 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1987:401206 HCAPLUS

DOCUMENT NUMBER:

107:1206

TITLE:

Direct evidence for two distinct prosomatostatin converting enzymes. Detection using a rapid, sensitive, and specific assay for propeptide

converting enzymes

AUTHOR(S):

Mackin, Robert B.; Noe, Bryan D.

CORPORATE SOURCE: SOURCE:

Sch. Med., Emory Univ., Atlanta, GA, 30322, USA Journal of Biological Chemistry (1987), 262(14),

6453-6

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The processing of prosomatostatin-I (aPSS-I) and prosomatostatin-II (aPSS-II) to either somatostatin-14 (SS-14) or somatostatin-28 (aSS-28), resp., was examd. in anglerfish pancreatic islets. Two distinct forms of prosomatostatin-converting enzyme (PCE) activity were detected by a rapid, sensitive, and specific assay. Examn. of the specificity of these 2 enzyme activities showed that 1 proteolytic activity performed the aPSS-I-to-SS-14 conversion, whereas the other protease liberated aSS-28 from aPSS-II to produce [Tyr7,Gly10]SS-14 and converted proinsulin to insulin. The aSS-28-generating PCE did not process proinsulin. Thus, different, specific PCEs are required for liberation of SS-14 and aSS-28 from their precursors.

79594-38-0 TΤ

RL: FORM (Formation, nonpreparative)

(formation of, from prosomatostatin-II by converting enzyme of pancreas islet)

·IT 79594-38-0

RL: FORM (Formation, nonpreparative)

(formation of, from prosomatostatin-II by converting enzyme of pancreas islet)

RN 79594-38-0 HCAPLUS

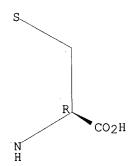
Somatostatin (sheep), 7-L-tyrosine-10-glycine- (9CI) (CA INDEX NAME) CN

SEQ 1 AGCKNFYWKG FTSC Absolute stereochemistry.

PAGE 1-A

PAGE 2-B

PAGE 2-C



L20 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

1987:196782 HCAPLUS ACCESSION NUMBER:

106:196782 DOCUMENT NUMBER:

Solid phase synthesis of somatostatin-28 II. A new TITLE: biologically active octacosapeptide from anglerfish.

pancreatic islets

Nicolas, Pierre; Delfour, Antoine; Boussetta, Hamadi; AUTHOR (S):

Morel, Alain; Rholam, Mohamed; Cohen, Paul

Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie Curie, Paris, 75006, Fr. CORPORATE SOURCE:

Biochemical and Biophysical Research Communications SOURCE:

(1986), 140(2), 565-73 CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: LANGUAGE:

Journal English

GI

H-Ser-Val-Asp-Ser-Thr-Asn-Asn-Leu-Pro-Pro-Arg-Glu-Arg-Lys-Ala-Gly-

Cys-Lys-Asn-Phe-Tyr-Trp-Lys-Gly-

Phe-Thr-Ser-Cys-OH

Ι

Anglerfish somatostatin-28 II (I) was synthesized by the solid-phase AΒ method along with its somatostatin-14 II and somatostatin-28 II-(1-12) corresponding domains. Homogeneity of the synthetic peptides was demonstrated by anal. reversed-phase HPLC, thin-layer chromatog., and electrophoresis. The peptides were further characterized by amino acids anal., fast-at. bombarding mass spectrometry, and/or 252Cf plasma desorption mass spectrometry. Synthetic I and somatostatin-14 II displace equally well the potent agonist (Tyro, D-Trp8)-somatostatin-14 from its specific binding sites on anterior pituitary cells membranes. Both peptides activate adenylate cyclase from dispersed rat anterior pituitary cells.

107897-58-5P IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and biol. activity of)

107897-58-5P ΙT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

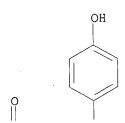
(prepn. and biol. activity of)

107897-58-5 HCAPLUS RN

Somatostatin (sheep), 7-L-tyrosine-10-glycine-12-L-tyrosine- (9CI) (CA CN INDEX NAME)

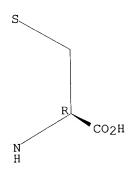
1 AGCKNFYWKG FYSC SEQ

Absolute stereochemistry.



PAGE 2-B

PAGE 2-C



HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 7 OF 22

1986:491649 HCAPLUS ACCESSION NUMBER:

105:91649 DOCUMENT NUMBER:

Proteolytic events in the maturation of pro-neuropeptides. The somatostatin model Morel, A.; Gluschankof, P.; Gomez, S.; Cohen, P. Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie TITLE:

AUTHOR(S): CORPORATE SOURCE:

Curie, Paris, F 75006, Fr.

Annales d'Endocrinologie (1986), 47(1), 35-9 SOURCE:

CODEN: ANENAG; ISSN: 0003-4266

DOCUMENT TYPE: Journal

French LANGUAGE:

The posttranslational processing (maturation) of precursors was studied with the model of prosomatostatin [74315-46-1]. A single and common precursor to both somatostatin-28 [75037-27-3] and -14 [51110-01-1] in the mouse hypothalamus, in contrast with the situation in the telostean fish Lophius piscatorius, was obsd. The search for a maturation activity was carried out with synthetic undecapeptide substrate including in its sequence the cleavage site for somatostatin-14 release. By using this peptide, a specific enzyme activity of 90 kilodaltons was characterized in rat brain cortex exts. This maturase, colocalized in the neurosecretory granules with the somatostatin products, generates both the N-terminal peptide S-28 (1-12) [81286-16-0] and the tetradecapeptide hormone (S-14) from the somatostatin-28, acting as an S-28 convertase [97162-92-0] producing free arginine and lysine residues present at the pair of basic amino acid signals. A model is proposed in which 3 peptide bonds are cleaved by this enzymic activity. In the teleostean fish L. piscatorius, 2 precursors coding for 2 different somatostatins were predicted by the detn. of cDNA sequence. In this system, a unique form of the tetradecapeptide hormone was obsd. The final maturation product of the 2nd precursor was shown to be a new 28-amino acid hormone called somatostatin-28 II [93460-56-1]. Moreover, the product of this 2nd gene after the action of the S-28 convertase from rat brain cortex is the (Tyr7,Gly10)S-14 deriv. predicted by the clone. The lack of maturation of the 2nd precursor thus does not depend on the structure of this natural analog of S-28.

93460-56-1 ΙT

RL: FORM (Formation, nonpreparative)

(formation of, of fish)

93460-56-1 ΙT

RL: FORM (Formation, nonpreparative)

(formation of, of fish)

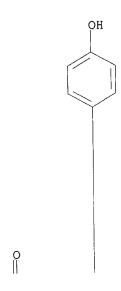
93460-56-1 HCAPLUS RN

Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-CN asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(CA INDEX NAME) (9CI)

1 SVDSTNNLPP RERKAGCKNF YWKGFTSC SEQ

Absolute stereochemistry.

PAGE 1-A



PAGE 1-C

PAGE 2-B

L20 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1986:443339 HCAPLUS

DOCUMENT NUMBER: 105:43339

TITLE: Insulin-selective somatostatin analogs for insulinoma

treatment

INVENTOR(S): Spiess, Joachim; Noe, Bryan Dale

PATENT ASSIGNEE(S): Salk Institute for Biological Studies, USA

SOURCE: Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

Audet 734583-claim 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 173527 EP 173527	A2 A3	19860305 19880203	EP 1985-305867	19850816
R: CH, DE, ZA 8505567 AU 8546548 CA 1333892 JP 61065900 PRIORITY APPLN. INFO	A A1 A1 A2	17, LI 19860326 19860306 19950110 19860404	ZA 1985-5567 AU 1985-46548 CA 1985-489706 JP 1985-191797 US 1984-646610	19850723 19850822 19850829 19850830 19840831

H-Ser-Val-Asp-Ser-Thr-Asn-Asn-Leu-Pro-Pro-

Arg-Glu-Arg-Lys-Ala-Gly-Cys-Lys-Asn-Phe-

Tyr-Trp-X1-Gly-Phe-Thr-Ser-Cys-OH

Peptides (I; X1 = Hyl, Lys) that are related to anglerfish somatostatin-28 AB were prepd., and were useful in the treatment of insulinona. I (X1 = Hy1)was prepd. by solid-phase synthesis.

Ι

93460-56-1P IT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, for treatment of insulinoma)

93460-56-1P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, for treatment of insulinoma)

93460-56-1 HCAPLUS RN

Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-CN asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME)

1 SVDSTNNLPP RERKAGCKNF YWKGFTSC SEQ

Absolute stereochemistry.

HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 9 OF 22 1985:108375 HCAPLUS

ACCESSION NUMBER:

102:108375

DOCUMENT NUMBER: TITLE:

Anglerfish preprosomatostatin II is processed to

somatostatin-28 and contains hydroxylysine at residue

23

AUTHOR(S):

Andrews, P. C.; Hawke, David; Shively, John E.; Dixon,

Jack E.

CORPORATE SOURCE:

Dep. Biochem., Purdue Univ., West Lafayette, IN,

47907, USA

SOURCE:

Journal of Biological Chemistry (1984), 259(24),

15021-4

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE:

Journal English

LANGUAGE: A peptide fraction contg. two 28-residue somatostatins, both products of the anglerfish (Lophius americanus) somatostatin II gene, was isolated, characterized, and subjected to amino acid sequence anal. One of the 2 forms of the 28-residue peptide contained 5-hydroxylysine. Hydroxylysine was identified in an acid hydroyzate of somatostatin-28 by gas chromatog./mass spectrometry. Fast-atom bombardment mass spectrometry indicated that the 2 forms of somatostatin-28 have mol. wts. of 3220 and 3204, representing the hydroxylated and nonhydroxylated peptides, resp. The location of the hydroxylated lysine was deduced by anal. of proteolytic fragments to be position 23. This represents the 1st observation of a hydroxylated peptide hormone and 1 of the few reported occurrences of hydroxylysine in noncollagen proteins.

IT 93460-56-1

RL: BIOL (Biological study)

(of pancreatic islet, of anglerfish, amino acid sequence of)

93460-56-1 IT

RL: BIOL (Biological study)

(of pancreatic islet, of anglerfish, amino acid sequence of)

93460-56-1 HCAPLUS RN

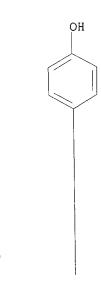
Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-CN asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME)

SEO

1 SVDSTNNLPP RERKAGCKNF YWKGFTSC

Absolute stereochemistry.

PAGE 1-A



PAGE 1-D

PAGE 2-B

PAGE 2-C

H
N
S
N
H
CO2H
NH2

R
CO2H

L20 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1985:43149 HCAPLUS

DOCUMENT NUMBER:

102:43149

TITLE: Characterization of a somatostatin-28 containing the

(Tyr-7, Gly-10) derivative of somatostatin-14: a terminal active product of prosomatostatin II processing in anglerfish pancreatic islets

AUTHOR(S):

Morel, Alain; Gluschankof, Pablo; Gomez, Sophie;

Fafeur, Veronique; Cohen, Paul

CORPORATE SOURCE:

Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie

Curie, Paris, 75006, Fr.

SOURCE:

Proceedings of the National Academy of Sciences of the

United States of America (1984), 81(22), 7003-6

CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB Anglerfish (Lophius piscatorius) Brockmann organs contained a form of somatostatin-14, identical to the hypothalamic tetradecapeptide, and 2 distinct forms of somatostatin-28, which were sepd. by reversed-phase HPLC. Anal. of the N-terminal amino acid sequence and comparison of the ability to incorporate 125I indicated that 1 of these forms corresponds to an octacosapeptide including in its sequence the 7-tyrosine, 10-glycine-contg. (Tyr-7, Gly-10) deriv. of somatostatin-14 (somatostatin II). Exposure of this somatostatin-28 species to an endopeptidase activity from the rat brain cortex generated a peptide immunol. related to

activity from the rat brain cortex generated a peptide immunol. related to somatostatin and undistinguishable from synthetic (Tyr-7, Gly-10) somatostatin-14 II by HPLC. This somatostatin-28 II exhibited a potent inhibitory effect on growth hormone release by rat anterior pituitary cells, comparable to the other somatostatin-28 form. Since (Tyr-7, Gly-10) somatostatin-14 II cannot be detected in anglerfish pancreatic islets, the results indicate that somatostatin-28 II represents the terminal active product of prosomatostatin II processing, whose structure

islets, the results indicate that somatostatin-28 II represents the terminal active product of prosomatostatin II processing, whose structure was predicted from the cDNA nucleotide sequence corresponding to the 2nd mRNA cloned from anglerfish Brockmann organs.

IT 93460-56-1

RL: PROC (Process)

(of pancreatic islets, characterization of)

IT 93460-56-1

RL: PROC (Process)

(of pancreatic islets, characterization of)

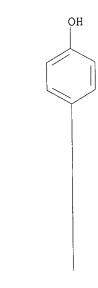
93460-56-1 HCAPLUS RN

Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME) CN

1 SVDSTNNLPP RERKAGCKNF YWKGFTSC SEQ

Absolute stereochemistry.

PAGE 1-A



PAGE 1-D

PAGE 2-B

PAGE 2-C (CH₂)3 Me N H Ĥ Н HO₂C (CH₂)₄ S NH2 CO2H Η

HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 11 OF 22

ACCESSION NUMBER:

1985:21486 HCAPLUS

DOCUMENT NUMBER:

102:21486

TITLE:

The complete amino acid sequence of anglerfish

somatostatin-28 II. A new octacosapeptide containing

the (Tyr7, Gly10) derivative of somatostation-14 I

AUTHOR(S):

Morel, Alain; Chang, Jui Yoa; Cohen, Paul

CORPORATE SOURCE:

Groupe Neurobiochim. Cell. Mol., Univ. Pierre et Marie

Curie, Paris, 75006, Fr.

SOURCE:

FEBS Letters (1984), 175(1), 21-4 CODEN: FEBLAL; ISSN: 0014-5793

DOCUMENT TYPE:

Journal

LANGUAGE:

English

A somatostatin-28 was isolated from the teleostean fish (Lophius AΒ piscatorius) Brockmann organs. Its amino acid sequence indicates that it corresponds to an octacosapeptide contg. in its C-terminal end the Tyr-7 Gly-10 deriv. of somatostatin-14 I. This structure is in agreement with that predicted from a cDNA nucleotide sequence. Since the corresponding somatostatin-14 II cannot be detected in this organ, somatostatin-28 II is a terminal product of prosomatostatin II processing in anglerfish pancreatic islets.

93460-56-1 ΙT

RL: PRP (Properties)

(amino acid sequence of)

93460-56-1 TT

RL: PRP (Properties)

(amino acid sequence of)

93460-56-1 HCAPLUS RN

Somatostatin-28 (sheep), 2-L-valine-3-L-aspartic acid-5-L-threonine-6-L-CN asparagine-7-L-asparagine-8-L-leucine-9-L-proline-21-L-tyrosine-24-glycine-(9CI) (CA INDEX NAME)

1 SVDSTNNLPP RERKAGCKNF YWKGFTSC SEO

PAGE 2-B

HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 12 OF 22

1983:84970 HCAPLUS ACCESSION NUMBER:

98:84970 DOCUMENT NUMBER:

Evidence for biosynthesis and differential TITLE:

post-translational proteolytic processing of different

(pre)prosomatostatins in pancreatic islets

AUTHOR(S):

CORPORATE SOURCE:

Noe, Bryan D.; Spiess, Joachim Sch. Med., Emory Univ., Atlanta, GA, 30322, USA Journal of Biological Chemistry (1983), 258(2), 1121-8 SOURCE:

CODEN: JBCHA3; ISSN: 0021-9258

Journal DOCUMENT TYPE: English LANGUAGE:

In anglerfish (AF) pancreatic islets, somatostatin-14 (SS-14) is

Audet 734583-claim 2

synthesized via a precursor-product pathway. Sequence analyses of cDNAs prepd. from AF islet mRNA have demonstrated the presence of mRNAs coding for 3 different AF preprosomatostatins. From these sequences it was predicted that 2 of the 3 precursors contain SS-14 at their C-terminus, whereas the 3rd has an analog form, [Tyr7,Gly10]SS-14, as its predicted C-terminus. Reverse-phase high-pressure liq. chromatog. was used to perform peptide mapping on the S-carboxymethylated (CM) tryptic products of mol. wt. (Mr) 8000-15,000, 2500-8000, and 1000-2000 peptides previously labeled in vitro with [3H]tryptophan and [35S]cysteine. Tryptic peptides generated from the Mr = 8000-15,000 and 2500-8000 polypeptides and labeled with 3H or 35S were eluted under different chromatog. conditions. Several of these peptides had retention times which did not deviate significantly from those of the CM tryptic products from both synthetic SS-14 and [Tyr7,Gly10]SS-14. The Mr = 1000-2000 peptides yielded only tryptic fragments identical with those generated from SS-14. The identities of the peptides that behaved in reverse-phase high pressure liq. chromatog. like the C-terminal tryptic fragments of SS-14 and [Tyr7,Gly10]SS-14 were confirmed by amino acid and sequence analyses. Thus, the gene coding for the [Tyr7,Gly10]SS-14-contg. precursor is expressed and the product of proteolytic processing of this precursor is significantly larger than SS-14. This indicates that the precursors which contain SS-14 and [Tyr7,Gly10]SS-14 are apparently subjected to differential post-translational proteolytic processing.

ΙT 79594-38-0P

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation) (formation of, by anglerfish pancreatic islets, precursors in)

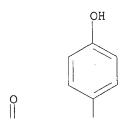
79594-38-0P ΙΤ

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation) (formation of, by anglerfish pancreatic islets, precursors in)

79594-38-0 HCAPLUS RN

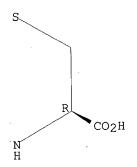
Somatostatin (sheep), 7-L-tyrosine-10-glycine- (9CI) (CA INDEX NAME) CN

1 AGCKNFYWKG FTSC SEO



PAGE 2-B

PAGE 2-C



L20 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

1981:584222 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 95:184222

Synthesis of one form of pancreatic islet somatostatin TITLE:

predominates

Noe, Bryan D. AUTHOR(S):

Sch. Med., Emory Univ., Atlanta, GA, 30322, USA CORPORATE SOURCE:

Journal of Biological Chemistry (1981), 256(18), SOURCE:

9397-400

CODEN: JBCHA3; ISSN: 0021-9258

Journal DOCUMENT TYPE: English LANGUAGE:

To det. the relative amt. of a newly described form of somatostatin

Audet 734583-claim 2

([Tyr7,Gly10]somatostatin) which is synthesized in anglerfish islets, the somatostatin-contg. pools from gel filtration eluates of exts. of islets incubated with [3H]tryptophan and [35S]cysteine or [14C]isoleucine were subjected to isocratic elution on reverse-phase high-pressure liq. chromatog. Essentially all of the somatostatin immunoreactivity and 86-92% of the [3H]tryptophan radioactivity coeluted with authentic somatostatin. Only 1.6% of the total [3H]tryptophan radioactivity recovered eluted at the elution position of the [Tyr7,Gly10] synthetic analog of somatostatin. Thus, tetradecapeptide somatostatin is by far the predominant form of somatostatin synthesized in anglerfish islets and questions are raised regarding the utility of the mRNA which codes for the precursor having the [Tyr7,Gly10] analog of somatostatin at its C terminus.

79594-38-0 ΙT

RL: FORM (Formation, nonpreparative)

(formation of, by pancreatic islets of anglerfish)

79594-38-0 IΤ

RL: FORM (Formation, nonpreparative)

(formation of, by pancreatic islets of anglerfish)

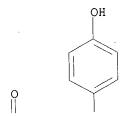
79594-38-0 HCAPLUS RN

Somatostatin (sheep), 7-L-tyrosine-10-glycine- (9CI) (CA INDEX NAME) CN

1 AGCKNFYWKG FTSC SEQ

Absolute stereochemistry.

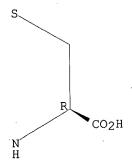
PAGE 1-A



H₂N (CH₂) 4

PAGE 2-B

PAGE 2-C



HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 14 OF 22

1980:580017 HCAPLUS ACCESSION NUMBER:

93:180017 DOCUMENT NUMBER:

Non-reducible cyclic, and azaphenylalanyl6 analogs of TITLE:

somatostatin

Hirst, B. H.; Reed, J. D.; Shaw, B.; Hayward, C. F.; AUTHOR(S):

Morley, J. S.

Med. Sch., Univ. Newcastle upon Tyne, Newcastle upon Tyne, NEl 7RU, UK CORPORATE SOURCE:

European Journal of Pharmacology (1980), 65(2-3), SOURCE:

151-6

CODEN: EJPHAZ; ISSN: 0014-2999

Journal DOCUMENT TYPE: LANGUAGE: English

Seven new analogs of somatostatin (I) [38916-34-6] are described, along AB with the effects of these analogs on pentagastrin [5534-95-2]-stimulated gastric acid and pepsin [9001-75-6] secretion in conscious cats. Replacement of the cystine disulfide bridge of I with an amide bridge, with or without deletion of the N-terminal dipeptide, resulted in analogs with .apprx.20% of the potency of I. Simultaneous omission of the 4-lysine residue in the amide-bridged analogs reduced the activity of the peptides to .apprx.5% of I. Substitution for 6-phenylalanine of I or an amide-bridged analog with azaphenylalanyl resulted in peptides with no detectable activity. The basic side-chain of 4-lysine is apparently important for the activity of I. The lack of activity of 6-azaphenylalanyl analogs of I demonstrate the extreme importance of the orientation of the side-chain of the 6-phenylalanine residue for the activity of I.

ΙT 75240-29-8

RL: BIOL (Biological study)

(stomach secretion inhibition by, structure in relation to)

75240-29-8 IT

RL: BIOL (Biological study)

(stomach secretion inhibition by, structure in relation to)

75240-29-8 HCAPLUS RN

5-14-Somatostatin (sheep reduced), N2-(6-amino-1-oxohexyl)-14-L-aspartic CN acid-, (144.fwdarw.5)-lactam (9CI) (CA INDEX NAME)

SEQ 1 XNFFWKTFTS D

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C

PAGE 2-A



L20 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1979:763 HCAPLUS

DOCUMENT NUMBER:

90:763

TITLE:

Inhibition of gastric acid secretion by stereoisomers

of somatostatin

AUTHOR(S):

Reed, J. D.; Hirst, B. H.; Gomez-Pan, A.; Coy, D. H.;

Schally, A. V.; Meyers, C.

CORPORATE SOURCE:

Med. Sch., Univ. Newcastle upon Tyne, Newcastle upon

Tyne, UK

SOURCE:

Metabolism, Clinical and Experimental (1978), 27(9,

Suppl. 1), 1411-13

CODEN: METAAJ; ISSN: 0026-0495

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB

The inhibition of gastric acid secretion in rats by cyclic somatostatin [38916-34-6] and 9 analogs was related to structure. D-Cys14-somatostatin [61425-92-1], Ala-D-Cys14-somatostatin [67374-97-4] had greater potency than cyclic somatostatin in this assay. The gastric acid secretin inhibition by D-Trp8-somatostatin [58976-46-8] equaled that of cyclic somatostatin. The greater acid secretion inhibitory potencies of 6 of the analogs were related to inhibitory potencies previously detd. in a growth hormone assay in rats in vitro and in insulin and glycogen assays in rats

in vivo. 68194-01-4 IT

RL: BIOL (Biological study)

(stomach acid secretion response to)

68194-01-4 ΙT

RL: BIOL (Biological study)

(stomach acid secretion response to)

68194-01-4 HCAPLUS RN

Somatostatin (sheep), 2-deglycine-3a-endo-glycine- (9CI) (CA INDEX NAME) CN

1 ACGKNFFWKT FTSC SEO

Absolute stereochemistry.

PAGE 1-A

Ph_

PAGE 1-B

PAGE 2-B

NH₂

L20 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1979:762 HCAPLUS

DOCUMENT NUMBER: TITLE:

90:762 Observations on the growth hormone, insulin, and

glucagon release-inhibiting activities of somatostatin

AUTHOR(S):

Coy, David H.; Meyers, Chester; Arimura, Akira;

Schally, Andrew V.; Redding, Tommie W.

CORPORATE SOURCE:

Dep. Med., Tulane Univ. Sch. Med., New Orleans, LA,

USA

SOURCE:

Metabolism, Clinical and Experimental (1978), 27(9,

Suppl. 1), 1407-10

CODEN: METAAJ; ISSN: 0026-0495

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Somatostatin analogs were compared with somatostatin [38916-34-6] for their ability to inhibit the release of growth hormone [9002-72-6] from rat anterior pituitary cells and to inhibit arginine-stimulated glucagon [9007-92-5] and insulin [9004-10-8] release in rats. The growth hormone release inhibiting activities of D-Ala2, D-Trp8-somatostatin [65375-80-6] and D-Trp8-somatostatin [58976-46-8] were 20 and 5 times greater than that of somatostatin. Cys2-Gly3-somatostatin [68194-01-4] and Cys2-D-Ala3-somatostatin [68194-02-5] had .apprx.40% greater growth hormone release inhibiting activities than somatostatin but their duration of action was greater. D-Trp8-D-Cys14-somatostatin [61950-59-2] had 220% of the glucagon release inhibiting activity of somatostatin but only 10%

Audet 734583-claim 2

of the insulin release inhibiting activity. L-6-Fluoro-Trp8-somatostatin [67374-97-4] and L-fluoro-Trp8-somatostatin [66582-76-1] were equipotent and 4 times as active as somatostatin in inhibiting growth hormone release. The D-6-fluoro-Trp8 [67392-90-9] and D-5-fluoro-Trp8 [67392-91-0] analogs had 10 and 20-30-times the growth hormone release-inhibiting activity of somatostatin.

IT 68194-01-4

RL: BIOL (Biological study) (pancreatic and pituitary hormone release inhibition by)

68194-01-4 IT

RL: BIOL (Biological study)

(pancreatic and pituitary hormone release inhibition by)

68194-01-4 HCAPLUS RN

Somatostatin (sheep), 2-deglycine-3a-endo-glycine- (9CI) (CA INDEX NAME) CN

1 ACGKNFFWKT FTSC SEQ

Absolute stereochemistry.

PAGE 1-A

Ph_

PAGE 1-B

PAGE 2-B

NH₂

HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 17 OF 22

ACCESSION NUMBER:

1978:406542 HCAPLUS

DOCUMENT NUMBER:

89:6542

TITLE:

Synthesis of carbacyclic analogs of somatostatin by combination of conventional and solid-phase peptide

synthesis methodology

AUTHOR(S):

SOURCE:

IT

Sarantakis, D.; Teichman, J.

CORPORATE SOURCE:

Res. Div., Wyeth Lab. Inc., Radnor, PA, USA Pept., Proc. Am. Pept. Symp., 5th (1977), 186-8.

Editor(s): Goodman, Murray; Meienhofer, Johannes.

Wiley: New York, N. Y.

CODEN: 370BAT

DOCUMENT TYPE:

Conference

LANGUAGE:

English

For diagram(s), see printed CA Issue. GI

Somatostatin analogs I and II were prepd. by the Merrifield synthesis of AB the appropriate peptides and cyclization by dicyclohexylcarbodiimidehydroxybenzotriazole or azide methods.

62361-29-9P I^{T}

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

62361-29-9P RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

62361-29-9 HCAPLUS RN

Somatostatin (sheep), cyclic (14.fwdarw.1)-peptide (9CI) (CA INDEX NAME) CN

NTE cyclic

SEQ 1 AGCKNFFWKT FTSC

PAGE 1-D

PAGE 2-A

$$H_2N$$
 (CH₂) $\frac{R}{4}$

Audet 734583-claim 2

L20 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

1977:478718 HCAPLUS ACCESSION NUMBER:

87:78718 DOCUMENT NUMBER:

A bicyclo-somatostatin analog, highly specific for the TITLE:

inhibition of growth hormone release

Sarantakis, D.; Teichman, J.; Clark, D. E.; Lien, E. AUTHOR(S):

L.

Res. Div., Wyeth Lab., Philadelphia, PA, USA CORPORATE SOURCE:

Biochemical and Biophysical Research Communications SOURCE:

(1977), 75(1), 143-8

CODEN: BBRCA9; ISSN: 0006-291X

Journal DOCUMENT TYPE: English

LANGUAGE: A combination of conventional and solid phase peptide synthesis methods were used to prepare to a homodetic cyclic disulfide tetradecapeptide, Wy 40391 [62361-29-9]. The analog inhibited the release of growth hormone [9002-72-6] in vivo without affecting either insulin or glucagon secretion. A correlation between binding affinity to receptors and specificity is suggested. The specificity of Wy 40391 may be useful for the treatment of growth hormone hypersecretion in humans.

62361-29-9P 63700-75-4P IT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release inhibition by)

62361-29-9P 63700-75-4P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release inhibition by)

62361-29-9 HCAPLUS RN

Somatostatin (sheep), cyclic (14.fwdarw.1)-peptide (9CI) (CA INDEX NAME) CN

cyclic NTE

1 AGCKNFFWKT FTSC SEO

PAGE 1-C

PAGE 2-A

RN 63700-75-4 HCAPLUS CN Somatostatin (sheep), 8-D-tryptophan-, cyclic (14.fwdarw.1)-peptide (9CI)

(CA INDEX NAME)

NTE cyclic

SEQ 1 AGCKNFFWKT FTSC

PAGE 1-D

PAGE 2-A

$$H_2N-C-CH_2-R$$

L20 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

1977:155983 HCAPLUS ACCESSION NUMBER:

86:155983

DOCUMENT NUMBER:

Cyclic somatostatin disulfide analogues TITLE:

Sarantakis, Dimitrios INVENTOR(S):

American Home Products Corp., USA PATENT ASSIGNEE(S):

U.S., 6 pp. SOURCE: CODEN: USXXAM

Patent DOCUMENT TYPE:

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
US 3997517 PRIORITY APPLN. INF	A .:	19761214	US	US 1976-653685 1976-653685	19760130 19760130

For diagram(s), see printed CA Issue. Cyclic somatostatin analog I was prepd. by the solid-phase method. Me3CO2C-Cys[CH2C6H4(OMe)-4]-Ala-Gly-Cys[CH2C6H4(OMe)-4]-Lys(CO2CH2C6H4Cl-AΒ 2)-Asn-Phe-Phe-Trp-Lys(CO2CH2C6H4C1-2)-Thr(CH2Ph)-Phe-Thr(CH2Ph)-Ser(CH2Ph)-resin was prepd. and cleaved with NH2NH2 to give the fully protected peptide hydrazide. The Me3CO2C group was cleaved from the latter with CF3CO2H, and a cyclic peptide bond was formed by an azide coupling. All other blocking groups were cleaved from the cyclic peptide, and a disulfide bond was formed by air oxidn. to give I. The s.c. administration of 3 mg/kg of I to Nembutal-treated rats decreased the blood serum levels of growth hormone (GH) to 40 ng/ml, whereas Nembutal-treated rats which were not given I had GH serum levels of 291 ng/ml. I at 3 mg/kg did not affect the insulin and glucagon serum levels in rats.

62361-29-9P TT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release inhibition by)

62361-29-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release inhibition by)

62361-29-9 HCAPLUS

Somatostatin (sheep), cyclic (14.fwdarw.1)-peptide (9CI) (CA INDEX NAME) RN CN

NTE cyclic

SEQ 1 AGCKNFFWKT FTSC

Absolute stereochemistry.

PAGE 1-C

PAGE 1-D

PAGE 2-A

H₂N (CH₂) 4

L20 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2003 ACS on STN

Audet 734583-claim 2

ACCESSION NUMBER:

1977:140469 HCAPLUS

DOCUMENT NUMBER:

86:140469

TITLE:

Cyclic dodecapeptide derivatives of somatostatin and

intermediates

INVENTOR(S):

Garsky, Victor M.

PATENT ASSIGNEE(S):

American Home Products Corp., USA

SOURCE:

U.S., 11 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent .

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE

APPLICATION NO. DATE

19750825 19750825

PRIORITY APPLN. INFO.:

US 3988304 A 19761026 US 1975-607303
RITY APPLN. INFO.: US 1975-607303

For diagram(s), see printed CA Issue.

The somatostatin analog I was prepd. for the treatment of diabetes mellitus and acromegaly. Thus, Me3CO2CNH(CH2)3CO-Lys(ZCl)-Asn-Phe-Phe-Trp-AB Lys(ZCl)-Phe-Thr(CH2Ph)-Phe-Thr(CH2Ph)-Ser(CH2Ph)-resin (ZCl = CO2CH2C6H4Cl-2) was prepd. by the solid-phase method and cleaved with NH2NH2 to give the protected peptide hydrazide. This hydrazide was coupled to H-Asp(OCMe3)-OCH2Ph and treated with CF3CO2H to give H2N(CH2)3CO-Lys(ZCl)-Asn-Phe-Phe-Trp-Lys(ZCl)-Phe-Thr(CH2Ph)-Phe-Thr(CH2Ph)-Ser(CH2Ph)-Asp-OCH2Ph. The latter was cyclized with dicyclohexylcarbodiimide and deblocked with HF to give I. I at 1 mg/kg s.c. decreased the blood serum growth hormone (GH) to 39 ng/ml after 15 min in nembutal-treated rats versus a blood serum GH level of 169 ng/ml without I.

62459-76-1P TΤ

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release inhibition by)

62459-76-1P TT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release inhibition by)

62459-76-1 HCAPLUS RN

Somatostatin (sheep reduced), 1-de-L-alanine-2-deglycine-3-de-L-cysteine-4-CN [N2-(4-amino-1-oxobutyl)-L-lysine]-14-L-aspartic acid-, cyclic (14.fwdarw.4)-peptide, diacetate (salt) (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

1 XKNFFWKTFT SD SEQ

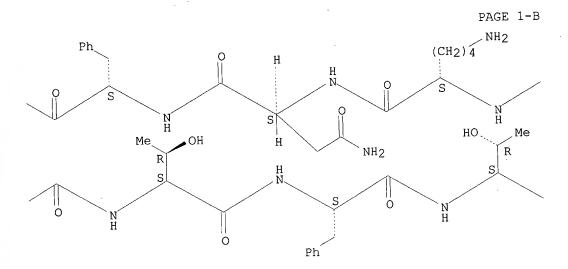
> CM1

CRN 60964-99-0

CMF C73 H98 N16 O18

1 XKNFFWKTFT SD SEO

PAGE 1-A



2 CM

CRN 64-19-7 C2 H4 O2 CMF

HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 21 OF 22

ACCESSION NUMBER:

1977:101222 HCAPLUS

DOCUMENT NUMBER:

TITLE:

86:101222 Synthesis of a nonreducible cyclic analog of

somatostatin having only growth hormone release

inhibiting activity

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

Garsky, V. M.; Clark, D. E.; Grant, N. H.

Res. Div., Wyeth Lab., Philadelphia, PA, USA

Biochemical and Biophysical Research Communications

(1976), 73(4), 911-16

CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE:

Journal English LANGUAGE:

A nonreducible analog of somatostatin cyclic [1-deAla, 2-deGly, 3.gamma.aminobutyrate, 14-Asp] somatostatin (I) [60964-99-0] was prepd. by a combination of solid phase and soln. peptide synthesis. In rats, I significantly suppressed pentobarbital-stimulated growth hormone [9002-72-6] release but had no effect on arginine-stimulated glucagon or insulin release. The linear form, NH2-.gamma.-Abu-Lys-Asn-Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Asp-OH [61864-13-9], was also prepd. and tested in vitro. It had only slight activity.

60964-99-0P IT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release-inhibiting activity of)

60964-99-0P TT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone release-inhibiting activity of)

60964-99-0 HCAPLUS

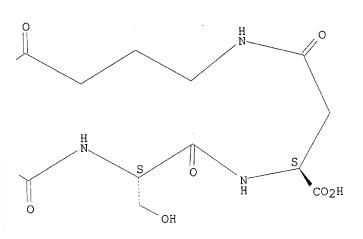
Somatostatin (sheep reduced), 1-de-L-alanine-2-deglycine-3-de-L-cysteine-4-RN CN

[N2-(4-amino-1-oxobutyl)-L-lysine]-14-L-aspartic acid-, cyclic (14.fwdarw.4)-peptide (9CI) (CA INDEX NAME)

SEQ 1 XKNFFWKTFT SD

Absolute stereochemistry.

PAGE 1-B NH₂ Ph. (CH₂) 4 Н Н N H S НО Me ОН Me. R NH2 R H N S 0 N H Ph



HCAPLUS COPYRIGHT 2003 ACS on STN L20 ANSWER 22 OF 22

1977:65953 HCAPLUS ACCESSION NUMBER:

86:65953 DOCUMENT NUMBER:

Dissociation of somatostatin effects. Peptides inhibiting the release of growth hormone but not TITLE:

glucagon or insulin in rats

Grant, Norman; Clark, Donald; Garsky, Victor; Jaunakais, Ivars; McGregor, William; Sarantakis, AUTHOR(S):

Dimitrios

Res. Div., Wyeth Lab., Philadelphia, PA, USA

CORPORATE SOURCE: Life Sciences (1976), 19(5), 629-31 CODEN: LIFSAK; ISSN: 0024-3205

SOURCE:

Journal DOCUMENT TYPE: English LANGUAGE:

For diagram(s), see printed CA Issue. GΙ

Na pentobarbital [57-33-0]-stimulated growth hormone [9002-72-6] release in rats was inhibited by the cyclic somatostatin analogs, Wy 19840 (I) and AΒ Wy 40056 (II) [60964-99-0]. Arginine [74-79-3]-stimulated glucagon [9007-92-5] or insulin [9004-10-8] release was unaffected by both analogs. Cyclic somatostatin [38916-34-6] was more potent than either

analog in inhibiting hormone secretion.

60964-99-0 ΙT

RL: BIOL (Biological study)

(growth hormone release selective inhibition by)

60964-99-0 IT

RL: BIOL (Biological study)

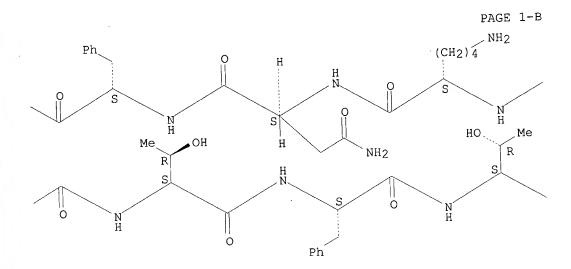
(growth hormone release selective inhibition by)

Somatostatin (sheep reduced), 1-de-L-alanine-2-deglycine-3-de-L-cysteine-4-RN[N2-(4-amino-1-oxobutyl)-L-lysine]-14-L-aspartic acid-, cyclic CN

(14.fwdarw.4)-peptide (9CI) (CA INDEX NAME)

1 XKNFFWKTFT SD SEQ

PAGE 1-A



PAGE 1-C

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> =>

=> d stat que 116

L1 5330 SEA FILE=REGISTRY ABB=ON PLU=ON SOMAT?
L10 STR

REP G1=(1-5) CH2
NODE ATTRIBUTES:
NSPEC IS R AT 4
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE L11 STR

REP G1=(1-5) CH2 NODE ATTRIBUTES: NSPEC IS R AT 4 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 10 STEREO ATTRIBUTES: NONE

L12

STR

 $\underset{4}{\overset{N\bigcirc}{\ominus}}\underset{5}{\overset{G1\bigcirc}{\ominus}}\underset{6}{\overset{S\bigcirc}{\ominus}}\underset{7}{\overset{G1\bigcirc}{\bigcirc}}\underset{8}{\overset{N\bigcirc}{\ominus}}\underset{9}{\overset{C}\overset{\longleftarrow}{\bigcirc}}\underset{10}{\overset{C}\overset{\longleftarrow}{\longleftarrow}}\underset{11}{\overset{O}}$

REP G1 = (1-5) CH2 NODE ATTRIBUTES:

NSPEC IS R ATDEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

STR

NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L14

REP G1 = (1-5) CH2

NODE ATTRIBUTES:

NSPEC IS R AT 5

NSPEC IS R AT 10 DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L15 1 SEA FILE=REGISTRY SUB=L1 SSS FUL L14 OR L10 OR L11 OR L12

L16 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L15

=>

=>

=> d ibib abs hitrn 116 1

L16 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1979:508235 HCAPLUS

DOCUMENT NUMBER:

91:108235

TITLE: INVENTOR(S): Aminoethylglycine containing polypeptides

Dairman, Wallace M.; Felix, Arthur M.; Gallo-Torres, Hugo E.; Heimer, Edgar P.; Meienhofer, Johannes A.

Hoffmann-La Roche, Inc., USA

PATENT ASSIGNEE(S): SOURCE:

U.S., 18 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4145337	A	19790320	US 1977-840922	19771011
EP 1449	A2	19790418	EP 1978-101073	19781005
EP 1449	А3	19790627		
EP 1449	B1	19810415		

	R: BE	, СН,	DE,	FR,	GB,	LU,	NL,	SE		
JP	5406117	1	A2	?	1979	0517		JP	1978-123693	19781009
ZA	7805691		A		1979	0926		ZA	1978-5691	19781009
DK	7804515		Α		1979	0412		DK	1978-4515	19781010
AU	508559		В1		1980	0327		AU	1978-40561	19781010
${\tt IL}$	55706		A1		1981	1030		IL	1978-55706	19781010
CA	1113457		A1		1981	1201		CA	1978-312934	19781010
AT	7807267		Α		1982	0715		AT	1978-7267	19781010
PRIORITY	APPLN.	INFO.	:				Ţ	JS 197	77-840922	19771011
GI										•

AB Somatostatin analogs H-(Aeg)m-X-Cys-Lys-Asn-Phe-Phe-X1-Lys-Thr-Phe-Thr-Ser-Cys-(Aeg)n-OH (Aeg = HNCH2CH2-Gly; X = null, Ala-Gly; X1 = Trp, D-Trp; m, n = 0 - 4) and their cyclic disulfides, e.g. I, useful as antiulcerogenic agents, stimulators of mucoprotein prodn., and inhibitors of gastric secretion, were prepd. by soln. and solid-phase methods.
H-Aeg-Cys-Lys-Asn-Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Cys-OH was apprx.5.6-fold less potent than somatostatin in its ability to prevent gastric ulceration in mice.

IT 70889-71-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

=> fil reg FILE 'REGISTRY' ENTERED AT 10:55:21 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can 115

L15 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 70889-71-3 REGISTRY

CN Somatostatin (sheep reduced), 1-de-L-alanine-2-[N-(2-aminoethyl)glycine]-3-de-L-cysteine-14-de-L-cysteine-, cyclic (13.fwdarw.2)-peptide (9CI) (CA

D

> 4-6 non-certify INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,4,7,10,13,16,19,22,25,28,31,34-Dodecaazacyclohexatriacontane, cyclic peptide deriv.

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C69 H94 N16 O15

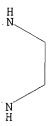
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C



1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 91:108235

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 11:04:34 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> =>

=> d stat que 119 L10 STR

 $\underset{4}{\overset{N\bigcirc}{\bigcirc}}\underset{5}{\overset{G1\bigcirc}{\bigcirc}}\underset{6}{\overset{S}\bigcirc}\underset{7}{\overset{G1\bigcirc}{\bigcirc}}\underset{8}{\overset{N\bigcirc}{\bigcirc}}\underset{9}{\overset{C}\bigcirc}\underset{10}{\overset{C}\bigcirc}\underset{11}{\overset{C}\bigcirc}\underset{12}{\overset{C}\bigcirc}$

REP G1=(1-5) CH2
NODE ATTRIBUTES:
NSPEC IS R AT 4
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE L11 STR

REP G1=(1-5) CH2 NODE ATTRIBUTES: NSPEC IS R AT 4 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 10 STEREO ATTRIBUTES: NONE

L12 STR

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REP G1=(1-5) CH2 NODE ATTRIBUTES:

NSPEC IS R AT 4
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 8

STEREO ATTRIBUTES: NONE

L18 49 SEA FILE=REGISTRY SSS FUL L10 OR L11 OR L12

L19 25 SEA FILE=HCAPLUS ABB=ON PLU=ON L18

=>

=>

=> d ibib abs hitrn 119 1-25

L19 ANSWER 1 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:144141 HCAPLUS

DOCUMENT NUMBER: 139:30973

TITLE: A frame shifted disulfide bridged analogue of

angiotensin II

AUTHOR(S): Schmidt, Boris; Kuhn, Christian; Ehlert, Dennis K.;

Lindeberg, Gunnar; Lindman, Susanna; Karlen, Anders;

Hallberg, Anders

CORPORATE SOURCE: TU Darmstadt, Institut for Organic Chemistry,

Darmstadt, D-64287, Germany

SOURCE: Bioorganic & Medicinal Chemistry (2003), 11(6),

985-990

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB N-(2-Mercaptoethyl)glycine [NMGly] was incorporated into the 3 and 5 positions of angiotensin II and oxidized to give the corresponding cyclized disulfide c[NMGly3,5]Ang II. The binding affinity to the angiotensin II receptor (AT1) of this conformationally constrained analog, which is related to the potent Ang II agonist c[Hcy3,5]Ang II, was examd. The analog had no affinity to the AT1 receptor. Theor. conformational anal. was performed to compare the conformational characteristics of model compds. of c[Hcy3,5]Ang II and the frame shifted analog c[NMGly3,5]Ang II to explain the lack of affinity.

IT 543739-94-2P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(angiotensin frame shifted disulfide bridged analog receptor binding in relation in relation to structure)

IT 543739-97-5

RL: PRP (Properties)

(angiotensin frame shifted disulfide bridged analog receptor binding in relation in relation to structure)

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 2 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2002:692513 HCAPLUS

138:117735

TITLE:

Human somatostatin receptor specificity of

backbone-cyclic analogs containing novel sulfur

building units

AUTHOR(S):

Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

SOURCE:

Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San

Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE:

Conference English

LANGUAGE:

The synthesis and the biol. properties of novel disulfide bridged backbone AΒ cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor dets. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

252845-45-7, PTR 3213 252845-47-9, PTR 3219

252845-48-0, PTR 3221

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 3 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:332670 HCAPLUS

DOCUMENT NUMBER:

136:341003

TITLE:

Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S):

Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

Israel

PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.

No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002052315 US 6051554	A1 A	20020502 20000418	US 2000-734583 US 1998-100360	20001213 19980619

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US 6355613
                                    В1
                                             20020312
                                                                     US 1998-203389
                                                                                                19981202
        WO 9965508
                                    A1
                                             19991223
                                                                    WO 1999-IL329
                                                                                               19990615
              W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
                    DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
                    MD, RU, TJ, TM
              RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                                                US 1998-100360
                                                                                          A2 19980619
                                                                US 1998-203389
                                                                                          A2 19981202
                                                               WO 1999-IL329
                                                                                          A2 19990615
                                                                US 1995-488159
                                                                                          A2 19950607
                                                                US 1995-569042
                                                                                          A2 19951207
                                                               US 1996-690609
                                                                                          A2 19960731
OTHER SOURCE(S):
                                       MARPAT 136:341003
```

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X

CO-(CH₂)_n

Appl.

AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-45-7P, PTR 3213 252845-47-9P, PTR 3219 252845-48-0P, PTR 3221

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L19 ANSWER 4 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:197431 HCAPLUS

DOCUMENT NUMBER: 136:386384

TITLE: Human Somatostatin Receptor Specificity of

Backbone-Cyclic Analogues Containing Novel Sulfur

Building Units

AUTHOR(S): Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov,

Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University,

SOURCE:

Jerusalem, 91904, Israel

Journal of Medicinal Chemistry (2002), 45(8),

1665-1671

CODEN: JMCMAR; ISSN: 0022-2623

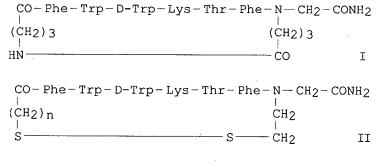
American Chemical Society

PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:

Journal English

GΙ

English



AB Somatostatin-14 (somatostatin) and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg building units, such as Acm-S-CH2CH2N(Fmoc)CH2CO2H (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT 252845-45-7P 252845-47-9P 425428-86-0P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT:

25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 5 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:642749 HCAPLUS

DOCUMENT NUMBER: 135:351981

TITLE: Synthesis and characterization of the pentadentate

macrobicyclic ligand, 14-thia-1,4,8,11-

tetraazabicyclo[9.5.3]nonadecane (L1) and its nickel(II) complexes. X-ray crystal structure of

[Ni(L1)(ClO4)](ClO4).cntdot.2[Ni(L1)(OH2)](ClO4)2.cntd

ot.6H2O

AUTHOR(S):

Coulter, Kevin R.; McAuley, Alexander; Rettig, Steven CORPORATE SOURCE:

SOURCE:

Cominco Chemical Company, Trail, BC, V1R 3W0, Can. Canadian Journal of Chemistry (2001), 79(5/6), 930-937

CODEN: CJCHAG; ISSN: 0008-4042

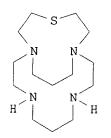
National Research Council of Canada

Journal English

PUBLISHER: DOCUMENT TYPE:

LANGUAGE:

GI



Ι

AB The pentadentate macrobicycle, 14-thia-1,4,8,11tetraazabicyclo[9.5.3]nonadecane (L1, I), was synthesized by high diln. cyclization of 1-thia-4,8-diazacyclododecane ([10]aneN2S, 2) with N, N'-bis(.alpha.-chloroacetamido)propane (3) and subsequent redn. of the di-oxo intermediate. The structure of the [Ni(L1)(ClO4)](ClO4).cntdot.2[N i(L1)(OH2)](ClO4)2.cntdot.6H2O complex (monoclinic, P21/c, a 13.9261(4), b30.279(2), c 17.1248(3) .ANG., .beta. 94.5065(3).degree.) at R = 0.039 (Rw = 0.034) for 911 parameters using 18,266 reflections with I > 3.sigma.I was detd. The ligand adopts a trans-III configuration. The Ni(II) ion is pseudooctahedral with Ni-S = 2.3896(10) .ANG. in [Ni(L1)(ClO4)]+ and 2.4193(10) .ANG., 2.4225(10) .ANG., in the two [Ni(L1)(H2O)]2+ cations. Both nickel(II) and nickel(III) complexes are six-coordinate in soln. Oxidn. of the [Ni(L1)(OH2)]2+ complex with K2S2O8 in aq. soln. yielded an ESR active Ni(III) species and the frozen soln. spectrum displayed axial symmetry with g = 2.159 and g = 2.024. In CH3CN, the [Ni(L1)(solv)]2+ complex showed two reversible redox waves corresponding to the Ni2+/+ couple at E1/2 = -1.807 V vs. Fc + /0 and Ni + /2 + couple at E1/2 = 0.715 Vvs. Fc+/0.

TΤ 371156-16-OP, 14-Thia-1,4,8,11-tetraazabicyclo[9.5.3]nonadecane-3,9-dione

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reactant for prepn. of nickel(II) perchlorato and aqua complexes of thiatetraazabicyclononadecane pentadentate macrobicycle)

REFERENCE COUNT: 45

THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 6 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

1999:811096 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 132:50250

TITLE:

Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S):

Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S):

Peptor Ltd., Israel PCT Int. Appl., 82 pp.

SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent

English

FAMILY ACC. NUM. COUNT:

10

PATENT INFORMATION:

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		JE,	νr,	EE,	ED,	LT,	GB,	GD,	GE	,	GH,	GM,	HK,	HU,	ID,	IL,	IN,	IS,
		MNI	MW.	MY	NO,	NC,	NΔ,	Dr.	D.C.	`,	LK,	CD'	LT,	ьU,	LV, SI,	MD,	MG,	MK,
		TM.	TR.	Τ12Σ,	IID,	IIG	IIC	HT.	IN.	, T	KU, VII	5D,	OL,	DG,	AZ,	DV,	ΣL,	TU,
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AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene

Ι

spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = $10-6\,$ nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT **252845-45-7P**, PTR 3213 **252845-47-9P**, PTR 3219 **252845-48-0P**, PTR 3221

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin

analogs)

REFERENCE COUNT:

SOURCE:

RECORD. ALL CITATIONS AVAILABLE

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 7 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:520525 HCAPLUS

DOCUMENT NUMBER: 129:276287

TITLE: Cylindrical .beta.-Sheet Peptide Assemblies

AUTHOR(S): Clark, Thomas D.; Buriak, Jillian M.; Kobayashi,

Kenji; Isler, Markus P.; McRee, Duncan E.; Ghadiri, M.

Reza

CORPORATE SOURCE: Departments of Chemistry and Molecular Biology and the

Skaggs Institute for Chemical Biology, The Scripps

Research Institute, La Jolla, CA, 92037, USA

Journal of the American Chemical Society (1998),

120(35), 8949-8962

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

Recent reports have shown that cyclic peptides composed of an even no. of alternating D- and L-amino acids can adopt flat, disklike conformations and stack through backbone-backbone hydrogen-bonding to form extended nanotubular structures. The present work details a general strategy for limiting this self-assembly process through backbone alkylation, giving rise to cylindrical .beta.-sheet peptide dimers. Scope and limitations of dimerization are examd. through NMR, FT-IR, mass spectral, and X-ray crystallog. studies of 20 cyclic peptides varying in ring size, location and identity of backbone alkyl substituents, and amino acid compn. The cyclic peptides are shown to self-assemble both in soln. and in the solid state through the expected antiparallel .beta.-sheet hydrogen-bonding network. While soln. dimerization by cyclic octapeptides appears general, peptides with alternative smaller or larger ring sizes fail to self-assoc. Formation of cylindrical .beta.-sheet ensembles is found to tolerate a no. of backbone N-alkyl substituents, including Me, allyl, Pr, and pent-4-en-1-yl groups, as well as a range of amino acid side chains. Within the hemi-N-methylated octapeptide framework, residues exhibit differential propensities for dimer stabilization, analogous to amino acid .beta.-sheet propensities in natural systems. Dimer-forming cyclic D, L-peptides are thus among the most structurally well characterized and synthetically accessible .beta.-sheet peptide model systems.

IT 213843-47-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(cylindrical .beta.-sheet peptide assemblies)
REFERENCE COUNT: 92 THERE ARE 92 CITED REF

THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 8 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:381586 HCAPLUS

DOCUMENT NUMBER: 127:95584

TITLE: Synthesis and biological activity of novel

backbone-bicyclic substance-P analogs containing

lactam and disulfide bridges

AUTHOR(S): Bitan, Gal; Sukhotinsky, Inna; Mashriki, Yaffa;

Hanani, Menachem; Selinger, Zvi; Gilon, Chaim

CORPORATE SOURCE: Departments Org. and Biol. Chemistry, Hebrew Univ.

Jerusalem, Jerusalem, 91904, Israel

SOURCE: Journal of Peptide Research (1997), 49(5), 421-426

CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER: Munksgaard
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A biased library of 60 novel backbone-bicyclic Substance P analogs was prepd. by the simultaneous multiple peptide synthesis method. The peptides, contg. both a lactam and a disulfide ring, were synthesized by combined Boc and Fmoc chemistries, and were cyclized on the resin. Cleavage of the S-benzyl group and oxidn. of the sulfhydryl groups was enabled by adaptation of the diphenylsulfoxide-trichloromethylsilane method to solid-phase synthesis. The peptides were screened for NK-1 and NK-3 activity, and were found to be weak agonists.

IT 192198-98-4 192199-00-1 192199-02-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (substance P analogs synthesis and biol. activity contg. lactam and disulfide bridges)

L19 ANSWER 9 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:578817 HCAPLUS

DOCUMENT NUMBER: 125:266403

TITLE: Backbone-to-backbone cyclized and linear pseudopeptide

analogs of substance P as ligands to the substance P

receptors from rat brain

AUTHOR(S): Rivera-Baeza, C.; Kaljuste, K.; Unden, A.

CORPORATE SOURCE: Dep. Neurochem. Neurotoxicol., Stockholm Univ.,

Stockholm, Swed.

SOURCE: Neuropeptides (Edinburgh) (1996), 30(4), 327-333

CODEN: NRPPDD; ISSN: 0143-4179

PUBLISHER: Churchill Livingstone

DOCUMENT TYPE: Journal LANGUAGE: English

Two series of backbone modified substance P analogs were synthesized. In the first group of analogs the N-terminal region of substance P, SP(1-4), was replaced by a polyamine segment or aliph. .omega.-amino fatty acid residues. Two of these analogs displaced 125I-Bolton-Hunter labeled substance P from rat brain synaptosomes with IC50 values of 1.3 and 1.6 nM, resp. These affinities are similar to that of substance P (IC50 1.3 nM). The second group of analogs were a set of backbone-to-backbone cyclized pseudopeptides. In these analogs two peptide bonds at the C-terminal portion of substance P were replaced by the reduced peptide bonds (.PSI.[CH2NH]) which were further reductively alkylated with 3(4-methylbenzylthio)propanal. After cleavage from the resin the peptides were oxidized into a cyclic disulfide. All of the cyclic analogs of substance P interacted with the NK1 receptor from rat brain with IC50 values in the micromolar range.

IT 182490-86-4P 182490-91-1P 182490-95-5P 182490-98-8P 182491-01-6P 182491-04-9P 182491-06-1P 182491-08-3P 182491-11-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and binding of backbone-to-backbone cyclized and linear pseudopeptide analogs of substance P as ligands for tachykinin NK1 receptors from rat brain)

L19 ANSWER 10 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1996:125916 HCAPLUS

DOCUMENT NUMBER: 124:248760

TITLE: Complexes of rhodium with

thiobis (ethylenenitrilo) tetraacetic acid; a potential

bifunctional chelate for use in radiotherapy

AUTHOR(S): Powell, Nigel A.; Hill, Angela M.; Levason, William;

Webster, Michael

CORPORATE SOURCE: Johnson Matthey Technology Centre, Reading, RG4 9NH,

SOURCE: Journal of the Chemical Society, Dalton Transactions:

Inorganic Chemistry (1996), (4), 467-71

CODEN: JCDTBI; ISSN: 0300-9246

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

Reaction of RhCl3 with the potential bifunctional chelating agent thiobis(ethylenenitrilo)tetraacetic acid (H4tedta) gave

[Rh(H3tedta)Cl2].cntdot.H2O. Both chloride ligands are readily lost on refluxing in H2O, to give [Rh(Htedta)].cntdot.3H2O which was characterized by an x-ray study. Further reaction with dil. HX (X = Cl, Br or I) led to the monohalides [Rh(H2tedta)X].cntdot.nH2O shown by 13C-{1H} NMR spectroscopy to have halide trans to S. In contrast, thiocyanate is shown

to bind trans to N. The complexes represent the 1st isolated mononuclear compds. of this thioether-contg. analog of ethylenediaminetetraacetate.

TΤ 174912-87-9P

> RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and crystal structure of)

174912-84-6P IΤ

> RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction with hydrogen halides or potassium thiocyanate)

IT 174912-85-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and reaction with hydrogen halides or potassium thiocyanate)

ΙT 174912-86-8P 174912-88-0P 174912-89-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L19 ANSWER 11 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:879143 HCAPLUS

DOCUMENT NUMBER: 124:41276

TITLE: Processing of silver halide color photographic

materials using Fe chelate of aminopolycarboxylic acid

as bleaching agent Ishikawa, Takatoshi

INVENTOR(S): PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 52 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07181654	A2	19950721	JP 1993-345918	19931224
US 5814436	A	19980929	US 1997-863931	19970527
PRIORITY APPLN. INFO.	: .		JP 1993-345918 ·	19931224
• •			US 1994-362931	19941223

AB The claimed method is characterized by that (1) the material has .gtoreq.1 Ag halide emulsion layer contg. tabular grains with the (100) crystal surface and AgCl content of 50-100 mol% and (2) the bleach soln. contains .gtoreq.1 Fe chelate of aminopolycarboxylic acid selected from the compd. I (R1-6 = H, OH, aliph. or arom. group; W = bivalent group C atom; M1-4 = H, cation) or R7N(CH2CO2M5)(CH2CO2M6), (R7 = alkyl; M5, M6 = H, cation). The Fe chelates have effective bleaching capability, shorten the time for bleach, and reduce bleach stain and bleach fog. The compds. also reduce environmental impact as they are biodegradable. The chelates are particularly suitable for bleach-fix acceleration in color paper processes.

IT 168201-05-6

RL: TEM (Technical or engineered material use); USES (Uses) (processing of Ag halide color photog. materials using Fe chelate of aminopolycarboxylic acid as bleaching agent)

L19 ANSWER 12 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1995:733548 HCAPLUS

DOCUMENT NUMBER:

123:213013

TITLE:

SOURCE:

Processing of silver halide color photographic

materials

INVENTOR(S):

Ishikawa, Takatoshi; Yoshida, Kazuaki; Seki, Hiroyuki

PATENT ASSIGNEE(S):

Fuji Photo Film Co Ltd, Japan Jpn. Kokai Tokkyo Koho, 45 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07120898 PRIORITY APPLN. INFO.	A2:	19950512	JP 1993-269208 JP 1993-269208	19931027 19931027

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AB In the title method comprising color developing imagewise exposed Ag halide color photog. materials and desilvering followed by washing and/or stabilizing, a Fe(III) complex of a compd. R3CR2(CO2M2)CR1(CO2M1)NHWNHCR4(CO2M3)CR5(CO2M4)R6 (I; R1-6 = H, aliph. group, arom. group, hydroxy; W = divalent C-contg. linking group; M1-4 = H, cation) is used as a bleaching

agent in the desilvering process and the washing water and/or the stabilizing soln. contains .gtoreq.1 of compd. II and III (R7, R10 = H, alkyl, amido, alkali metal; R8, R9, R11-14 = H, halo, alkyl, hydroxy, amino, nitro, carboxylic acid, sulfonci acid). The bleaching agent is highly biodegradable, stains of the materials are prevented even when small nos. of them are processed, and images with good storage stability are obtained. Thus, a color photog. film was processed using a bleach-fix bath contg. Fe(III) complex of I [R1-6 = M1-4 = H, W = (CH2)2] and washing water contg. II (R7 = Me, R8 = R9 = H).

IT 168201-05-6

RL: TEM (Technical or engineered material use); USES (Uses) (photog. processing using aminopolycarboxylic acid ferric complex bleaching agent and washing or stabilizing soln. contg. thiazole deriv.)

L19 ANSWER 13 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1994:701276 HCAPLUS

DOCUMENT NUMBER:

121:301276

TITLE:

A new general solid-phase method for the synthesis of

backbone-to-backbone cyclized peptides

AUTHOR(S):

Kaljuste, Kalle; Unden, Anders

CORPORATE SOURCE:

Dep. Neurochem. Neurotoxicol., Stockholm Univ.,

Stockholm, Swed.

SOURCE:

International Journal of Peptide & Protein Research

(1994), 43(5), 505-11

CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE:

Journal English

LANGUAGE:

GI

H-Leu?[CH2N]Ser-Pro-Gly-Lys-Val?[CH2N]Ala-Pro-Lys-Tyr-NH2
CH2CH2CH2S SCH2CH2CH2 I

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Howelly

A model peptide with the sequences Ala-Pro-Lys(2ClZ)-Tyr(2BrZ) was AR synthesized on a 4-methylbenzhydryl amine (MBHA) polystyrene resin using conventional Boc/benzyl protective group strategy. The amino acid aldehyde Boc-valinal was coupled by reductive alkylation with NaCNBH3 in acidified DMF for 1 h. The secondary amine in the peptide-resin Boc-Val.psi.[CH2NH]Ala-Pro-Lys(2ClZ)-Tyr(2BrZ)-MBHA was reductively alkylated by 3(4-methylbenzylthio)propanal at 40.degree. for 6 h, resulting the peptide-resin Boc-Val.psi.[CH2N(CH2CH2CH2S-pMeBzl)]Ala-Pro-Lys(2ClZ)-Tyr(2BrZ)-MBHA. After the removal of the Boc group the synthesis was continued employing the above-mentioned methods, which led to the resin-bound peptide Leu.psi.[CH2N(CH2CH2CH2CFDMeBzl)]Ser-Pro-Gly-Lys(2ClZ)-Val.psi.[CH2N(CH2CH2CH2S-pMeBzl)]Ala-Pro-Lys(2ClZ)-Tyr(2BrZ)-MBHA. The peptide was cleaved from the resin with hydrogen fluoride. Reversed-phase HPLC and plasma desorption mass spectrometry anal. showed that the expected peptide Leu.psi.[CH2N(CH2CH2CH2SH)]Ser-Pro-Gly-Lys-Val.psi.[CH2N(CH2CH2CH2SH)]Ala-Pro-Lys-Tyr-NH2 was obtained as the major product with low levels of side products. Intramol. oxidn. of the thiols gave the backbone to backbone cyclized peptide-I .-

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IT 159105-49-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, by solid-phase method)

L19 ANSWER 14 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1993:437403 HCAPLUS

DOCUMENT NUMBER:

119:37403

TITLE:

Method for processing color photographic material

INVENTOR(S):

Seki, Hiroyuki

PATENT ASSIGNEE(S):

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. DATE ______ _____ ____ JP 04274236 A2 JP 1991-119608 19920930 19910228

PRIORITY APPLN. INFO.: JP 1991-119608 19910228 In the title photog, processing method involving processing a color developed Ag halide photog. material with a bleaching soln., a ferric

complex salt(s) of an org. acid is used as a bleaching agent, whose concn. is controlled to 0.10 - 0.1 mol/L, with the said org. acid contg. .gtoreq.2 N atoms, and the bleaching agent of redox potential .gtoreq.200 $\ensuremath{\mathsf{mV}}$ should account for .gtoreq.50 mol% relative to the total amt. of bleaching agents used. The processing time following bleaching and before drying is controlled to .ltoreq.13 min. Fast desilvering is achieved.

IT ' 148354-20-5

RL: USES (Uses)

(bleaching agent, photog. bleaching soln. contg.)

L19 ANSWER 15 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1993:112883 HCAPLUS

DOCUMENT NUMBER:

118:112883

TITLE:

Composition for processing silver halide color photographic material and photographic processing

INVENTOR(S):

Okada, Hisashi; Yagihara, Morio; Inaba, Tadashi

PATENT ASSIGNEE(S): SOURCE:

Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 04204533 A2 19920724 JP 1990-330777 19901130 JP 1990-330777 PRIORITY APPLN. INFO.: 19901130 The title compn. contains a metal chelating compd. formed from an

aminoalkanoic acid and a metal salt such as an Fe(III) or Mn(III) salt. The aminoalkanoic acid may be represented by W1N(R11)L1A1 (R11 = H, aliph. group, arom. moiety; W1 = aliph. group or arom. moiety having SR1 as substituent; R1 = aliph. group or arom. moiety; W1 and R11 may together form a ring; L1 = alkylene, arylene, etc.; A1 = carboxy, sulfo, etc.). The use of the title compn. inhibits the formation of stains. Also claimed is a processing method using the title material.

146110-27-2 TT

RL: USES (Uses)

(photog. bleach solns. contg.)

L19 ANSWER 16 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1993:80910 HCAPLUS

DOCUMENT NUMBER:

118:80910

TITLE:

Polyfunctional macroheterocycles. 4. Synthesis and

some chemical transformations of nitrogen- and

sulfur-containing crowns with exocyclic

methoxycarbonyl, cyano, and phenethyl groups

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

Voronkov, M. G.; Knutov, V. I.; Butin, M. K. Irk. Inst. Org. Khim., Irkutsk, 664033, Russia

Khimiya Geterotsiklicheskikh Soedinenii (1992), (2),

273-6

CODEN: KGSSAQ; ISSN: 0132-6244

DOCUMENT TYPE:

LANGUAGE:

Journal

Russian

GT

Acylation of 1,5-diamino-, 1,5-bis(2-phenethylamino)- and AB 1,5-bis(2-methoxycarbonylethylamino)-3-thiapentanes by adipoyl and phthaloyl chlorides, and also by oxalyl chloride gave the corresponding 13-, 22- and 18-membered macroheterocycles, contg. exocyclic methoxycarbonyl and phenylethyl groups. Redn. of endocyclic amides and exocyclic esters on nitriles by LiAlH4 gave nitrogen- and sulfur-contg. crown compds., which were transformed to CH2NR2, CH2OH, and CH2NH2 groups, resp. Macrobicyclic compds. contg. endocyclic amide groups were prepd. and reduced to give the corresponding CH2NR2 derivs. Thus, cyclocondensation of RNHCH2CH2SCH2CH2NHR (R = H, PhCH2CH2, CH2CH2CO2Me) with CloCXCOCl (X = bond, 1,2-C6H4) gave 68-72% macroheterocycles I.

ΙT 145644-73-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L19 ANSWER 17 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1990:539830 HCAPLUS

DOCUMENT NUMBER:

113:139830

TITLE:

AUTHOR(S):

Study of chelates of N, N, N', N'-

CODEN: ANQUEX; ISSN: 1130-2283

tetrakis(carboxymethyl)cystamine with divalent

transition and post-transition metal ions in solution Gonzalez Perez, J. M.; Gonzalez Garcia, S.; Niclos,

Gutierrez, J.

CORPORATE SOURCE:

Fac. Farm., Univ. Granada, Granada, 18071, Spain

SOURCE:

Anales de Quimica (1990), 86(1), 9-18

DOCUMENT TYPE: Journal

LANGUAGE: Spanish Aq. soln. systems H4L/M(II) of N,N,N',N'-tetrakis(carboxymethyl)cystamine [H4L = TCC = (HO2CCH2) 2NC2H4S-SC2H4N(CH2CO2H) 2 and transition or post-transition M(II) ions (M = Mn, Fe, Co, Ni, Cu, Zn, Cd, Pb) were studied by potentiometric, conductometric and spectrophotometric (Co, Ni, Cu) methods. The dissocn. consts. (pKa) and/or formation consts. (log .beta.) of the species MH2L, MHL, ML or M2L2 (M .dbldag. Pb), and M2L for I = 0.1 M (KNO3) and $t = 0.25.00 \text{ .+-} \cdot 0.05.\text{degree.C}$ are reported. By appropriate comparisons of these results with literature data for chelates of a selection of polydentate ligands (with or without thioether sulfur as potential donor atom), the most probable structure for the studied TCC chelates is discussed. In MH2L and MHL species, the ligand (H2L and HL resp.) should acts mainly as a tridentate N-substituted-iminodiacetate (IDA) chelating agent, the interaction or weak coordination disulfide-to-metal ion only seem probable with M = Cd and Pb. .dbldag. Pb, the non protonated chelates with TCC/M = 1/1 will be

dinuclear species (M2L2), where the octahedral environment of each M(II) ion should be reached with two NO2-tridentate IDA groups (M = Mn, Fe) or with one NO2-tridentate IDA group and other SNO-tridentate .beta.-mercapto-ethyl-amino-acetate moiety (M = Co, Ni, Cu, Zn, Cd) from different ligand L units. In PbL, the ligand L will at least acts as SNO2-tetradentate. This role will be doubly played by the ligand L in the chelation of two metal ions to form M2L with M = Pb, Cd, Ni, Cu and probably Co and Zn, whereas each moiety of L will acts only as NO2-tridentate (IDA type) with the more hard metal ions Fe(II) and Mn(II) in the corresponding M2L chelates.

ΙT 129500-42-1 129500-43-2 129500-44-3 129500-45-4 129500-46-5 129500-47-6

129524-56-7

RL: PRP (Properties); FORM (Formation, nonpreparative) (formation consts. of)

L19 ANSWER 18 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

1990:422715 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 113:22715

TITLE: Enantioselective conjugate addition of Grignard

reagents to enones catalyzed by chiral zinc(II)

complexes

AUTHOR(S): Jansen, Johan F. G. A.; Feringa, Ben L.

CORPORATE SOURCE: Dep. Org. Chem., Univ. Groningen, Groningen, 9747 AG,

Neth.

SOURCE: Journal of Organic Chemistry (1990), 55(13), 4168-75

CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:22715

Various chiral zinc(II) complexes catalyze the asym. 1,4-addn. of Grignard reagents to .alpha.,.beta.-unsatd. ketones with high chemoselectivities (yields of 1,4-adducts, 83-99%), high regioselectivities (1,4/1,2 ratios up to 499) and modest enantioselectivities (ee's up to 33%). A study of several factors (i.e., ligand, solvent, counterions, order and rate of addns., temp., and the nature of Grignard reagents) that influence the regio- and enantioselectivities is given. Based on the addn. of isopropylmagnesium halides to 2-cyclohexenone as a model reaction, it was established that the highest enantioselectivities are reached with in situ prepd. zinc complexes derived from optically active diamino alc. ligands using lithium bases in THF as the solvent. A mechanistic rationalization is given.

127357-20-4 IT

RL: CAT (Catalyst use); USES (Uses)

(zinc catalysts contg., for enantioselective conjugate addn. of Grignard reagent to cyclohexenone)

L19 ANSWER 19 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:633674 HCAPLUS

DOCUMENT NUMBER: 111:233674

Preparation of chelates of aminopolycarboxylates as TITLE:

therapeutic and diagnostic agents

INVENTOR(S): Berg, Arne; Almen, Torsten; Thomassen, Terje;

Klaveness, Jo; Rongved, Pal

PATENT ASSIGNEE(S): Nycomed A/S, Norway

Eur. Pat. Appl., 42 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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EP 299795
                      A2
                             19890118
                                             EP 1988-306520
                                                              19880715
     EP 299795
                       А3
                             19890802
     EP 299795 A3 19090002
EP 299795 B1 19920318
         R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
     WO 8900557 A1 19890126
                                           WO 1988-GB572
                                                             19880715
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     AU 8819980
                 A1
                             19890213
                                           AU 1988-19980
                                                              19880715
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                       B2
                                             JP 1988-505904
     JP 02504269
                       Т2
                             19901206
                                                              19880715
     JP 2833766
                       B2
                             19981209
     HU 54621
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                                           HU 1988-4196
                                                              19880715
     EP 466200
                       A1
                            19920115
                                           EP 1991-113755
                                                              19880715
     EP 466200 B1
                           19960424
         R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
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                           19930316
                                           ES 1988-306520
                                                              19880715
     HU 64950
                      A2
                           19940328
                                           HU 1993-2702
                                                              19880715
                   E 19960515 AT 1991-113755 19880715
T3 19960701 ES 1991-113755 19880715
C1 19970210 RU 1988-4743079 19880715
A 19890426 ZA 1988-5178 19880718
A 19900111 DK 1990-74 19900111
A 19900308 NO 1990-192 19900115
B 19961014
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     ES 2086445
     RU 2073005
     ZA 8805178
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     NO 179973
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                            19970122
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                      A1
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                             19911107
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PRIORITY APPLN. INFO.:
                                         GB 1987-16778
                                                              19870716
                                         GB 1987-16914
                                                              19870717
                                         EP 1988-306520
                                                              19880715
                                         HU 1988-4196
                                                              19880715
                                         WO 1988-GB572
                                                              19880715
OTHER SOURCE(S):
                         MARPAT 111:233674
     XCHR1NZ(CHR2)nA(CHR3)mNZ1CHR4X1 [I; R1-R9 = H, hydroxyalkyl,
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XCHR1NZ(CHR2)nA(CHR3)mNZ1CHR4X1 [I; R1-R9 = H, hydroxyalkyl, (hydroxylated) alkoxy, alkoxyalkyl; A, A1 = O, S, NY; ACHR1 = C-N bond; X-X4 = carboxy (deriv.), R1; Y = (CHR5)p N(CHR6X2)2, CHRX3; Z = CHR7X4; groups Z together = (CHR8)qA1(CHR9)r; n, m, p, q, r = 2-4], useful as chelating agents for prepn. of diagnostic and therapeutic agents (no data), were prepd. N(CH2CO2H)3, H2SO4, and EtOH were refluxed 4 h to give N(CH2CO2Et)3, which in EtOH was added dropwise to hot aminopropanediol. The mixt. was stirred 3 h at 120.degree. to give an amide. The latter in DMF was stirred with tosic acid and MeC(OMe)2Ph at 60.degree. and 200 mbar to give a ketal which was treated with LiAlH4 in refluxing THF followed by treatment with BrCH2CO2Na in MeOH/H2O at 40.degree. and stirring overnight with HBr in H2O/acetone to give N,N,N-tris-[(N'-carboxymethyl-N'-2,3-dihydroxypropyl)-2-aminoethyl]amine. The Gd(III) chelate of the latter was prepd. by heating with Gd2O3 in H2O at 95.degree. overnite. A soln. contg. 6.9 g of the chelate and 20 mL of H2O was prepd.

IT 122596-98-9P 122596-99-0P 122597-02-8P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as diagnostic agent)

L19 ANSWER 20 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1986:218052 HCAPLUS

DOCUMENT NUMBER: 104:218052

AUTHOR(S):

SOURCE:

TITLE: A binuclear copper(II) complex with a bridging

thioether ligand. Crystal and molecular structure of

dicopper (thiobis(ethylenenitrilo)tetraacetate)

pentahydrate

Berg, Jeremy M.; Hodgson, Keith O.

CORPORATE SOURCE: Dep. Chem., Stanford Univ., Stanford, CA, 94305, USA

Inorganic Chemistry (1986), 25(11), 1800-3

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal LANGUAGE: English

AB Cu2(TEDTA).5H2O (H4TEDTA = thiobis(ethylenenitrilo)tetraacetic acid) was prepd. and its structure detd. by x-ray diffraction methods. The crystals belong to the space group P212121 with a 9.646(4), b 14.264(5), c 14.724(5).ANG., and Z = 4. The structure was refined by full-matrix least squares to R = 3.8%, Rw = 4.7%. The crystal structure consists of binuclear units contg. 2 independent Cu(II) ions, each in a tetragonally distorted octahedral environment. The thioether S atom bridges the Cu atoms. The crystal structure is held together by a combination of bridging carboxylate groups and an extended H-bond network.

IT 101348-83-8P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and crystal structure of)

L19 ANSWER 21 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1980:84850 HCAPLUS

DOCUMENT NUMBER: 92:84850

TITLE: An electrochemical study of the adsorption of two

isomeric chromium(III) complexes on mercury electrodes: thio ether as an anchoring group

AUTHOR(S): Peerce, Pamela J.; Anson, Fred C.

CORPORATE SOURCE: Arthur A. Noyes Lab., California Inst. Technol.,

Pasadena, CA, 91125, USA

SOURCE: Journal of Electroanalytical Chemistry and Interfacial

Electrochemistry (1979), 105(2), 317-28

CODEN: JEIEBC; ISSN: 0022-0728

DOCUMENT TYPE: Journal LANGUAGE: English

AB Cyclic voltammetry and chronocoulometry were used to exam. the electrochem. and adsorption by Hg of 2 isomeric complexes of Cr(III) with a multidentate ligand bearing a thioether group, thiobis(ethylenenitrllo)tetraacetic acid, S[CH2CH2N(CH2COOH)2]2. One isomer contains a S-Cr bond and is very strongly adsorbed. The 2nd isomer lacks this bond and is adsorbed to a lesser degree. Back-bonding from Cr to S is argued to play an important role in the adsorption of the first isomer. Upon redn., both isomers yield the same (Cr(II) product. A dimeric form of the 2nd isomer in which the 2 Cr(III) centers are bridged by an acetate group is proposed to form at certain pH values. The different coordination environments of the 2 Cr(III) centers in the dimer cause them to be reduced a different potentials.

IT 70983-09-4 70983-10-7

AUTHOR(S):

RL: PEP (Physical, engineering or chemical process); PROC (Process) (adsorption of, by mercury electrode)

L19 ANSWER 22 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1979:533280 HCAPLUS

DOCUMENT NUMBER: 91:133280

TITLE: Coordination chemistry of chromium(III) with

thiobis(ethylenenitrilo)tetraacetic acid (TEDTA)
Peerce, Pamela J.; Gray, Harry B.; Anson, Fred C.
Arthur A. Noyes Lab., California Inst. Technol.,

CORPORATE SOURCE: Arthur A. Noyes Lab., Cal Pasadena, CA, 91125, USA

SOURCE: Inorganic Chemistry (1979), 18(9), 2593-9

CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The reaction between Cr(ClO4)3 and thiobis(ethylenenitrilo)tetraacetic acid (TEDTA) leads to 2 different geometrically isomeric complexes depending upon the pH of the reaction soln. Pure solns. of the 2 isomers were prepd. and their spectra, pH titrns., anation by azide, reactions with heavy metal cations, and electrochem. were studied. For purposes of

comparison, the behavior of analogous Cr(III) complexes of EDTA, oxybis(ethylenenitrilo)tetraacetic acid, and pentamethylenedinitrilotetraa cetic acid were also examd. The 2 isomeric Cr-TEDTA complexes are concluded to have cis and trans configurations with respect to the coordinated N atoms. In the cis isomer, the ligand is pentadentate and a H2O mol. is coordinated to Cr(III). In the trans isomer, the ligand is hexadentate and the thioether S atom occupies a coordination position. The position of the isomerization equil. appears to be governed by the difference in pK.alpha. of the uncoordinated acetic acid group in the two isomers. Both isomers spontaneously adsorb on Hg electrodes and the adsorption of the trans isomer, in which the S atom is coordinated to the Cr(III) center, is extraordinarily strong.

IT 70983-09-4P 70983-10-7P 71031-50-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reactions of)

L19 ANSWER 23 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1967:417469 HCAPLUS

DOCUMENT NUMBER: 67:17469

TITLE: Zirconium complex formation with some

polyaminopolyacetic acids

AUTHOR(S): Tikhonova, L. I.

SOURCE: Zhurnal Neorganicheskoi Khimii (1967), 12(4), 939-43

CODEN: ZNOKAQ; ISSN: 0044-457X

DOCUMENT TYPE: Journal LANGUAGE: Russian

The chelate formation of Zr4+ with following complexons was studied by an ion exchange method: EDTA (I), diethylenetriaminepentaacetic acid (II), 2-propanol-1,3-diaminetetraacetic acid (III), ethyl ether 2,2'-diaminetetraacetic acid (IV), and ethyl sulfide 2,2'-diaminetetraacetic acid (V). The distribution of carrier free 95Zr between soln. and KU-2 cation exchange resin was measured by the elution of 95Zr from the column with complexon solns. Only 1:1 chelates were found. The instability consts. and media in which they have been detd. are: I, (1.1 .+-. 0.1) .times. 10-29, 1.2M HCl; II, (1.09 .+-. 0.04) .times. 10-34, 0.39M HCl; III, (2.6 .+-. 0.2) .times. 10-24, 0.1M KCl, pH 1.8; IV, (1.9 .+-. 0.1) .times. 10-25, 0.1M KCl, pH 1.6; V, (6.8 .+-. 0.4) .times. 10-24, 0.1M KCl, pH 2.2. The high stability of the II chelate is ascribed to the octadentate function of the II anion. The stability of the Zr4+-I chelate is higher than that of the corresponding Th4+-I chelate is higher than that of the corresponding Th4+, u4+, and Pu4+ chelates. This is explained by the high ionic charge to radius ratio and rather low ionization potential of Zr4+.

IT 16871-74-2

SOURCE:

RL: PRP (Properties)
 (stability of)

L19 ANSWER 24 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1967:119393 HCAPLUS

DOCUMENT NUMBER: 66:119393

TITLE: Spectrophotometric study of complex-formations of

thallium(III) with some complexons

AUTHOR(S): Kornev, V. I.; Astakhov, K. V.; Rybina, V. I. CORPORATE SOURCE: V. I. Lenin Gos. Ped. Inst., Moscow, USSR

Ricerca Scientifica (1967), 41(2), 420-5

CODEN: RISCAZ; ISSN: 0035-5011

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB Complex formation of T13+ with 2,2'-diaminodiethyl sulfide-N,N,N',N'-tetraacetic acid (H4R) and diethylenetriaminepentaacetic acid (H5P) was studied at 18-20.degree. spectrophotometrically. The isomolar plot of the optical d. D vs. compn. and the D vs. [Ti3+]: [H4R] plot showed only the

1:1 complex. In the T1(C104)3-H5P system there are 1:1 and 2:1 complexes. The 1st is not stable. The av. values for the acidolysis const. Kac and the instability const. Ki of the 1:1 complexes are: for H5P 4.37 and 3.92 .times. 10-29, and for H4R 6.39 and 4.95 .times. 10-22, resp. For the corresponding complexes with Fe3+, Kac and pKi are: for H5P 0.354 and 27.50, and for H4R 1.424 and 20.67, resp.

IT 15977-96-5

RL: PRP (Properties)

(ionization and stability consts. of)

L19 ANSWER 25 OF 25 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1965:36434 HCAPLUS

DOCUMENT NUMBER: 62:36434

ORIGINAL REFERENCE NO.: 62:6388h,6389a-b

TITLE: 2,2'-Diaminodiethylsulfido-N,gN,N',N'-tetraacetic acid

and some of its inner complexes

AUTHOR(S): Smolin, D. D.; Razbitnaya, L. M.; Viktorov, Yu. M.

SOURCE: Zhurnal Obshchei Khimii (1964), 34(11), 3713-15

CODEN: ZOKHA4; ISSN: 0044-460X

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB Ethylenimine in H2O was satd. with H2S at 25-30.degree., and the mixt. kept 10-12 hrs. at 0-5.degree. without access of air and evapd. in vacuo under N to give 65% S(CH2CH2NH2)2, b2 87-90.degree., m. 0.5-1.5.degree., d20 1.051, n2OD 1.533. This with C1CH2CO2H in H2O was treated at 20-30.degree. with 40% NaOH, finally solid NaOH, the mixt. kept 12 hrs. at room temp., adjusted to pH 2 with HCl, and chilled, and similarly repptd. from alk. soln. with HCl to give 55% S[CH2CH2NH(CH2CO2H)2]2, decompd. 200.degree.. This treated with aq. solns. of salts of indicated elements gave the following complexes: C12H17CeN2O8S.2H2O, stable at room temp. (anhyd. form after drying in vacuo at 140.degree.); C12H17N2O8SY.3H2O (anhyd. form after vacuum drying at 140.degree.); yellow C12H18N2O1OSU.4H2O, decompd. gradually on standing (anhyd. form after vacuum drying at 140.degree.). Absorption bands (uv) of these were reported.

=> =>

=> fil reg

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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP

PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> =>

=> d sqide can 118 1-49

L18 ANSWER 1 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 543739-97-5 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS STEREOSEARCH

MF C20 H28 N4 O5 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 139:30973

L18 ANSWER 2 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 543739-94-2 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

FS STEREOSEARCH

MF C47 H63 N13 O12 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 139:30973

L18 ANSWER 3 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 425428-86-0 REGISTRY

CN Glycinamide, 3-(2-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	lo	cation	description	
bridge stereo stereo	Gly-2 Ala-1 Trp-5	- Gly-9°	covalent bridge D D	

SEQ 1 AGFWWKTFG

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C71 H83 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

PAGE 1-C

PAGE 2-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 136:386384

ANSWER 4 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN 371156-16-0 REGISTRY

RN

14-Thia-1,4,8,11-tetraazabicyclo[9.5.3]nonadecane-3,9-dione (9CI) (CA CN

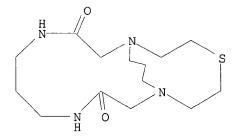
INDEX NAME)

FS 3D CONCORD

C14 H26 N4 O2 S MF

SR CA

LCSTN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 135:351981

L18 ANSWER 5 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-48-0 REGISTRY

CN Glycinamide, 3-(1-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3221

PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

FS

NTE modified (modifications unspecified)

type	10	cation	description	
bridge	Gly-2	- Gly-9 ·	covalent bridge	
stereo	Ala-1	-	D	
stereo	Trp-5	-	D	

SEQ 1 AGFWWKTFG

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C71 H83 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-B

PAGE 1-C

PAGE 2-A

HO_R_Me

3 REFERENCES IN FILE CA (1947 TO DATE)
3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735,

REFERENCE 2: 136:341003

REFERENCE 3: 132:50250

L18 ANSWER 6 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN RN 252845-47-9 REGISTRY

CN Glycinamide, D-phenylalanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3219

FS PROTEIN SEQUENCE; STEREOSEARCH

.SQL S

NTE modified (modifications unspecified)

type	lo	ocation	description	
bridge	Gly-2	- Gly-9	covalent bridge	
stereo	Phe-1	-	D	
stereo	Trp-5	-	D	

SEQ 1 FGFWWKTFG MF C67 H81 N13 O10 S2

SR CF

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

HN
$$\frac{H}{N}$$
 $\frac{H}{N}$ \frac

PAGE 1-C

Ph

~ c

__NH2

4 REFERENCES IN FILE CA (1947 TO DATE)

4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L18 ANSWER 7 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-45-7 REGISTRY

 ${\tt CN} \qquad {\tt Glycinamide, N-(2-mercaptoethyl)\,glycyl-L-phenylalanyl-L-tryptophyl-D-phenylalanyl-D-$

tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic
(1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3213

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	1	ocation	description	
bridge stereo	Gly-1 Trp-4	- Gly-8	covalent bridge D	-

SEQ 1 GFWWKTFG

MF C58 H72 N12 O9 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A

0=

PAGE 1-B

PAGE 1-C

Ph

****0

-NH₂

4 REFERENCES IN FILE CA (1947 TO DATE)

4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L18 ANSWER 8 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 213843-47-1 REGISTRY

 ${\tt CN} \qquad {\tt Cyclo[L-alanyl-D-phenylalanyl-N-(3-mercaptopropyl)-L-alanyl-D-phenylalanyl-N-(3-mercaptopropyl)-L-alanyl-D-phenylalanyl-N-(3-mercaptopropyl)} \\$

L-alanyl-D-phenylalanyl-N-(3-mercaptopropyl)-L-alanyl-D-phenylalanyl], cyclic (3.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE cyclic

modified (modifications unspecified)

type	location		description		
bridge stereo stereo stereo	Ala-1 Phe-2 Phe-4 Phe-6 Phe-8	- Ala-5 - - - -	covalent bridge D D D D	-	

SEQ 1 AFAFAFAF

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C54 H66 N8 O8 S2

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 129:276287

L18 ANSWER 9 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 192199-02-3 REGISTRY

CN Glycinamide, L-arginyl-L-phenylalanyl-L-phenylalanyl-N-[4-[[[(4-carboxy-1-oxobutyl)(2-mercaptoethyl)amino]acetyl]amino]butyl]glycyl-L-leucyl-N2-(2-mercaptoethyl)-, (4.fwdarw.1)-lactam, cyclic (4.fwdarw.6)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7,6,1

NTE multichain

modified (modifications unspecified)

type	- 10	ocation :	description
bridge	Arg-1	- Gly-1'	covalent bridge
bridge	Gly-6	- Gly-1'	covalent bridge

SEQ

1 RFFGLG

```
Audet 734583-bridge
 SEQ
         1 G
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
     C49 H72 N12 O9 S2
MF
SR
     CA
LC
     STN Files:
                CA, CAPLUS
               1 REFERENCES IN FILE CA (1947 TO DATE)
               1 REFERENCES IN FILE CAPLUS (1947 TO DATE)
REFERENCE
            1: 127:95584
L18 ANSWER 10 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN
     192199-00-1 REGISTRY
     oxopentyl)(3-mercaptopropyl)amino]acetyl]amino]propyl]glycyl-L-leucyl-N2-
     (2-mercaptoethyl)-, (4.fwdarw.1)-lactam, cyclic (4.fwdarw.6)-disulfide
     (9CI) (CA INDEX NAME)
     PROTEIN SEQUENCE; STEREOSEARCH
FS
SOL
    7,6,1
NTE multichain
     modified (modifications unspecified)
        ----- location ----- description
bridge Arg-1 - Gly-1' covalent bridge
bridge Gly-6 - Gly-1' covalent bridge
        1 RFFGLG
.SEO
SEO
        1 G
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF
    C50 H74 N12 O9 S2
SR
LC
     STN Files:
               CA, CAPLUS
              1 REFERENCES IN FILE CA (1947 TO DATE)
              1 REFERENCES IN FILE CAPLUS (1947 TO DATE)
REFERENCE
          1: 127:95584
L18
    ANSWER 11 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN
    192198-98-4 REGISTRY Glycinamide, L-arginyl-L-phenylalanyl-L-phenylalanyl-N-[3-[[[(5-carboxy-1-
RN
CN
    oxopentyl)(3-mercaptopropyl)amino]acetyl]amino]propyl]glycyl-L-leucyl-N2-
     (mercaptomethyl) -, (4.fwdarw.1) -lactam, cyclic (4.fwdarw.6) -disulfide
     (9CI) (CA INDEX NAME)
FS
    PROTEIN SEQUENCE; STEREOSEARCH
SOL
   7,6,1
NTE multichain
    modified (modifications unspecified)
```

type		location	description
bridge	Arg-1	- Gly-1'	covalent bridge
bridge	Gly-6	- Gly-1'	covalent bridge

SEQ 1 RFFGLG

SEQ 1 G

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

Audet 734583-bridge

MF C49 H72 N12 O9 S2

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 127:95584

L18 ANSWER 12 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

182491-11-8 REGISTRY

 $L-Methionina mide, \ N-[2-[[N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl)amino]-L-methionina mide, \ N-[2-[[N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl])amino]-L-methionina mide, \ N-[2-[[N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl])amino]-L-methionina mide, \ N-[2-[(N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl])amino]-L-methionina mide, \ N-[2-[(N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl])amino]-L-methionina mide, \ N-[2-[(N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl])amino]-L-methionina mide, \ N-[2-[(N-[2-[(N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl])amino]-L-methionina mide, \ N-[2-[(N-[2-[(N-[2-[(N-[2-[(N-[2-[N$ 4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-methionyl-Lphenylalanyl]amino]-3-phenylpropyl]-N-(3-mercaptopropyl)glycyl-L-leucyl-, cyclic (5.fwdarw.7)-disulfide, [5(S),7(S)]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL

NTE modified (modifications unspecified)

----- location ----description . Met-6 - Gly-9 covalent bridge bridge

SEQ 1 RPKPMMFFGL M

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C69 H114 N16 O9 S5

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 1-C

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18

RN

ANSWER 13 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN 182491-08-3 REGISTRY Substance P, 6-de-L-glutamine-7-[N-[2-amino-4-(methylthio)butyl]-N-(3-CN mercaptopropyl)-L-phenylalanine]-8-de-L-phenylalanine-9-[N-(2-amino-3phenylpropyl)-N-(3-mercaptopropyl)glycine]-, cyclic (7.fwdarw.9)disulfide, [7(S),9(S)]- (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL 11

NTE modified (modifications unspecified)

type		cation	description
bridge	Phe-7	- Gly-9	covalent bridge

SEQ 1 RPKPQMFFGL M

RELATED SEQUENCES AVAILABLE WITH SEQLINK MF C69 H113 N17 O10 S4

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

H₂N_

PAGE 1-B

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 14 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182491-06-1 REGISTRY

CN L-Methioninamide, N-[2-[[N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl)amino]-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-methionyl-L-phenylalanyl-L-phenylalanyl]amino]ethyl]-N-(3-mercaptopropyl)-L-leucyl-, cyclic (5.fwdarw.8)-disulfide, (S)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type		location	description
bridge	Met-6	- Leu-10	covalent bridge

SEQ 1 RPKPMMFFGL M

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C69 H114 N16 O9 S5

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

PAGE 2-A

NH₂

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 15 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182491-04-9 REGISTRY

CN Substance P, 6-de-L-glutamine-7-[N-[2-amino-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-phenylalanine]-9-deglycine-10-[N-(2-aminoethyl)-N-(3-mercaptopropyl)-L-phenylalanine]

Audet 734583-bridge

mercaptopropyl)-L-leucine]-, cyclic (7.fwdarw.10)-disulfide, (S)- (9CI)
(CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type	 lo	cation	desci	ription
bridge	Phe-7	- Leu-10	covalent k	oridge

SEQ 1 RPKPQMFFGL M

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C69 H113 N17 O10 S4

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

MeS
$$S$$
 N O Ph SMe O $I-Bu$ S N S N

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 16 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN

182491-01-6 REGISTRY
Substance P, 7-de-L-phenylalanine-8-[N-(2-amino-3-phenylpropyl)-N-(3-CN mercaptopropyl)-L-phenylalanine]-9-deglycine-10-[N-(2-aminoethyl)-N-(3mercaptopropyl)-L-leucine]-, cyclic (8.fwdarw.10)-disulfide, (S)- (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL

NTE modified (modifications unspecified)

type	- 10	ocation	description	_
bridge	Phe-8	- Leu-10	covalent bridge	.
				

1 RPKPQQFFGL M SEQ

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C69 H112 N18 O11 S3 MF

SR CA

STN Files: CA, CAPLUS LC

Absolute stereochemistry.

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 17 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182490-98-8 REGISTRY

CN Glycinamide, N-[2-[(L-arginyl-L-prolyl-L-lysyl-L-prolyl)amino]-4(methylthio)butyl]-N-(3-mercaptopropyl)-L-methionyl-L-phenylalanyl-Lphenylalanyl-N-[1-[[[1-(aminocarbonyl)-3-(methylthio)propyl](3mercaptopropyl)amino]methyl]-3-methylbutyl]-, cyclic (5.fwdarw.8)disulfide, [5(S),8[S(S)]]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

	-			
type		location	description	_
bridge	Met-6	- Met-11	covalent bridge	_

SEQ 1 RPKPMMFFGL M

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

MF C69 H114 N16 O9 S5

SR CA

LC STN Files: CA, CAPLUS

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PAGE 2-A

||

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 18 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182490-95-5 REGISTRY

CN Substance P, 6-de-L-glutamine-7-[N-[2-amino-4-(methylthio)butyl]-N-(3-mercaptopropyl)-L-phenylalanine]-10-de-L-leucine-11-[N2-(2-amino-4-methylpentyl)-N2-(3-mercaptopropyl)-L-methioninamide]-, cyclic (7.fwdarw.11)-disulfide, [7(S),11(S)]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 11

NTE modified (modifications unspecified)

type ----- location ----- description bridge Phe-7 - Met-11 covalent bridge

SEQ 1 RPKPQMFFGL M

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C69 H113 N17 O10 S4

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-A



- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

ANSWER 19 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

RN

182490-91-1 REGISTRY Substance P, 7-de-L-phenylalanine-8-[N-(2-amino-3-phenylpropyl)-N-(3-CN mercaptopropyl)-L-phenylalanine]-10-de-L-leucine-11-[N2-(2-amino-4methylpentyl)-N2-(3-mercaptopropyl)-L-methioninamide]-, cyclic (8.fwdarw.11)-disulfide, [8(S),11(S)]- (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL 11

NTE modified (modifications unspecified)

type	10	ocation	description	-
bridge .	Phe-8	- Met-11	covalent bridge	

1 RPKPQQFFGL M SEQ

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C69 H112 N18 O11 S3 MF

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 20 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182490-86-4 REGISTRY

CN Substance P, 8-de-L-phenylalanine-9-[N-(2-amino-3-phenylpropyl)-N-(3-mercaptopropyl)glycine]-10-de-L-leucine-11-[N2-(2-amino-4-methylpentyl)-N2-(3-mercaptopropyl)-L-methioninamide]-, cyclic (9.fwdarw.11)-disulfide, [9(S),11(S)]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SOL 13

NTE modified (modifications unspecified)

type	location		description	
bridge	. Gly-9	- Met-11	covalent bridge	

SEQ 1 RPKPQQFFGL M

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C69 H112 N18 O11 S3

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

<u>NH2</u>

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:266403

L18 ANSWER 21 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174912-89-1 REGISTRY

CN Rhodate(2-), iodo[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',S]-, dihydrogen, dihydrate, [OC-6-26-(R*,S*)]- (9CI) (CA INDEX NAME)

MF C12 H16 I N2 O8 Rh S . 2 H2 O . 2 H

CI CCS

SR CA

LC STN Files: CA, CAPLUS

●2 H+

●2 H₂O

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 22 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174912-88-0 REGISTRY

CN Rhodate(2-), bromo[[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',S]-, dihydrogen, [OC-6-26-(R*,S*)]- (9CI) (CA INDEX NAME)

MF C12 H16 Br N2 O8 Rh S . 2 H

CI CCS

SR CA

LC STN Files: CA, CAPLUS

●2 H+

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

L18 ANSWER 23 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 174912-87-9 REGISTRY

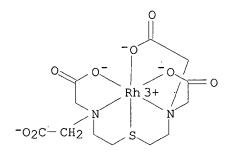
CN Rhodate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,S]-, hydrogen, trihydrate, [OC-6-25-(R*,S*)]- (9CI) (CA INDEX NAME)

MF C12 H16 N2 O8 Rh S . 3 H2 O . H

CI CCS

SR CA

LC STN Files: CA, CAPLUS



● H+

●3 H₂O

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 124:248760 REFERENCE

L18 ANSWER 24 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

174912-86-8 REGISTRY RN

CN [OC-6-23-(R*,R*)]- (9CI) (CA INDEX NAME) C13 H16 N3 O8 Rh S2 . 2 H2 O . 2 K

MF

CI CCS

SR CA

CA, CAPLUS LCSTN Files:

2 K+

●2 H₂O

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 124:248760 REFERENCE

ANSWER 25 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

RN

174912-85-7 REGISTRY Rhodate(2-), chloro[[N,N'-(thiodi-2,1-ethanediyl)bis[N-CN (carboxymethyl)glycinato]](4-)-N,N',O,O',S]-, dihydrogen, monohydrate,

 $[OC-6-26-(R^*,S^*)]-(9CI)$ (CA INDEX NAME)

C12 H16 C1 N2 O8 Rh S . H2 O . 2 H $\,$ MF

CI CCS

SR CA

LCSTN Files: CA, CAPLUS

2 H+

● н20

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 124:248760

Audet 734583-bridge

ANSWER 26 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

RN 174912-84-6 REGISTRY

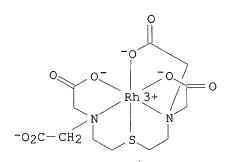
Rhodate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[N-CN (carboxymethyl)glycinato]](4-)-N,N',O,O',ON,S]-, hydrogen, dihydrate, $[OC-6-25-(R^*,S^*)]-(9CI)$ (CA INDEX NAME)

C12 H16 N2 O8 Rh S . 2 H2 O . H $\,$ MF

CCS CI

SR CA

STN Files: CA, CAPLUS LC



) H+

●2 H₂O

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 124:248760 REFERENCE

ANSWER 27 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

RN 168201-05-6 REGISTRY

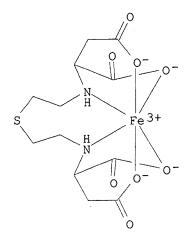
Ferrate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[L-aspartato]](4-)]-, CN hydrogen (9CI) (CA INDEX NAME)

 $\bar{\text{C12}}$ $\bar{\text{H16}}$ Fe N2 O8 S . H MF

CCS CI

SR CA

STN Files: CA, CAPLUS, USPATFULL LC



● H+

2 REFERENCES IN FILE CA (1947 TO DATE) 2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 124:41276 REFERENCE

123:213013 REFERENCE 2:

L18 ANSWER 28 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

159105-49-4 REGISTRY RN

L-Tyrosine, N-[2-[[N-(2-amino-4-methylpentyl)-N-(3-mercaptopropyl)-L-seryl-CN L-prolylglycyl-L-lysyl]amino]-3-methylbutyl]-N-(3-mercaptopropyl)-L-alanyl-L-prolyl-L-lysyl-, cyclic (1.fwdarw.5)-disulfide, monohydrofluoride,

[1(S), 5(S)] - (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

SOL 10

NTE modified (modifications unspecified)

type	lo	cation	desc	cription 	
bridge	Ser-2	- Ala-7	covalent	bridge 	

1 LSPGKVAPKY SEQ

C56 H96 N12 O11 S2 . F H MF

CA SR

STN Files: CA, CAPLUS LC

Absolute stereochemistry.

PAGE 1-A

HF

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 121:301276 REFERENCE

ANSWER 29 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

RN

148354-20-5 REGISTRY
Ferrate(1-), [[N,N'-(thiodi-2,1-ethanediyl)bis[N-CN

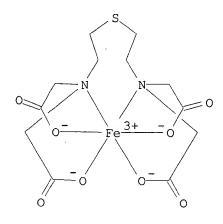
(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']-, hydrogen, (OC-6-21)-(9CI) (CA INDEX NAME)

 $\text{C12}\ \text{H16}\ \text{Fe}\ \text{N2}\ \text{O8}\ \text{S}$. H MF

CI CCS

SR

LCSTN Files: CA, CAPLUS



● H+

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 119:37403

L18 ANSWER 30 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 146110-27-2 REGISTRY

CN Iron, [N-[2-[[2-[bis(carboxymethyl)amino]ethyl]thio]ethyl]glycinato(3-)]-

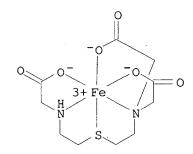
(9CI) (CA INDEX NAME)

MF C10 H15 Fe N2 O6 S

CI CCS

SR CA

LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 118:112883

L18 ANSWER 31 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 145644-73-1 REGISTRY

CN 1,10-Dithia-4,7,13,16-tetraazacyclooctadecane-5,6,14,15-tetrone,

4,7,13,16-tetrakis(2-phenylethyl)- (9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C44 H52 N4 O4 S2

SR CA

LC STN Files: BEILSTEIN*, CA, CAPLUS

(*File contains numerically searchable property data)

$$\begin{array}{c|c} \text{CH}_2\text{-}\text{CH}_2\text{-}\text{Ph} \\ \hline \text{O} & \text{CH}_2\text{-}\text{CH}_2\text{-}\text{Ph} \\ \hline \text{O} & \text{N} \\ \hline \text{N} & \text{N} \\ \hline \text{N} & \text{S} \\ \hline \text{Ph-}\text{CH}_2\text{-}\text{CH}_2 \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 118:80910

L18 ANSWER 32 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129524-56-7 REGISTRY

CN Ferrate(4-), bis[.mu.-[[N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,O,ON:N',O',ON']]di-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glycine, N, N'-(dithio-1,2-ethanediyl)bis[N-(carboxymethyl)-, iron complex

MF C24 H32 Fe2 N4 O16 S4

CI CCS

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

L18 ANSWER 33 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 129500-47-6 REGISTRY

CN Manganate(4-), bis[.mu.-[[N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,O,ON:N',O',ON']]di-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Audet 734583-bridge

Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, manganese CN complex

C24 H32 Mn2 N4 O16 S4 MF

CCS CI

SR CA

CA, CAPLUS LC STN Files:

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 113:139830 REFERENCE

L18 ANSWER 34 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

129500-46-5 REGISTRY RN

 $\label{lem:cadmate(4-)} Cadmate(4-), \ bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-ethanediyl]]) and the control of the con$ CN (carboxymethyl)glycinato]](4-)]]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Glycine, N,N'-(dithiodi-2,1-ethanediyl) bis [N-(carboxymethyl)-, cadmium CNcomplex

C24 H32 Cd2 N4 O16 S4 MF

CCS CI

CA SR

STN Files: CA, CAPLUS LC

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 113:139830 REFERENCE

L18 ANSWER 35 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

129500-45-4 REGISTRY RN ·

Zincate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-CN (carboxymethyl)glycinato]](4-)]]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Glycine, N,N'-(dithiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, zinc CN complex

C24 H32 N4 O16 S4 Zn2 MF

CCS CI

CA SR

CA, CAPLUS STN Files: LC

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 113:139830 REFERENCE

L18

RN

ANSWER 36 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN 129500-44-3 REGISTRY ... Cuprate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-CN (carboxymethyl)glycinato]](4-)]]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Glycine, N,N'-(dithiodi-2,1-ethanediyl) bis [N-(carboxymethyl)-, copper complex

C24 H32 Cu2 N4 O16 S4 MF

CCS CI

SR CA

STN Files: LC CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

113:139830 REFERENCE 1:

ANSWER 37 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

129500-43-2 REGISTRY RN

CN (carboxymethyl)glycinato]](4-)]]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Glycine, N,N'-(dithiodi-2,1-ethanediyl) bis [N-(carboxymethyl)-, nickel CN complex

C24 H32 N4 Ni2 O16 S4 MF

CI CCS

CA SR

CA, CAPLUS STN Files: LC

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

ANSWER 38 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

129500-42-1 REGISTRY RN

Cobaltate(4-), bis[.mu.-[[N,N'-(dithio-2,1-ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)]]di- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN Glycine, N, N'-(dithiodi-2,1-ethanediyl) bis [N-(carboxymethyl)-, cobalt

complex

MF C24 H32 Co2 N4 O16 S4

CI CCS

SR CA

LC STN Files: CA, CAPLUS

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:139830

L18 ANSWER 39 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 127357-20-4 REGISTRY

CN 1,4,7-Trioxa-13-thia-10,16-diazacyclooctadecane-8,18-dione,

9,17-bis(1-methylethyl)-, [9S-(9R*,17R*)]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C18 H34 N2 O5 S

SR CA

LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 113:22715

L18 ANSWER 40 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 122597-02-8 REGISTRY

CN Bismuth, [1-thia-4,7,10-triazacyclododecane-4,7,10-triacetato(3-)-

N4, N7, N10, O4, O7, O10] - (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Thia-4,7,10-triazacyclododecane, bismuth deriv.

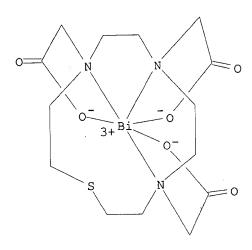
1-Thia-4,7,10-triazacyclododecane-4,7,10-triacetic acid, bismuth complex CN

C14 H22 Bi N3 O6 S MF

CI CCS

SR CA

CA, CAPLUS, TOXCENTER, USPATFULL STN Files: LC



1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 111:233674

ANSWER 41 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

122596-99-0 REGISTRY RN

Manganate(1-), [1-thia-4,7,10-triazacyclododecane-4,7,10-triacetato(3-)-CN N4,N7,N10,O4,O7,O10]-, hydrogen (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

1-Thia-4,7,10-triazacyclododecane, manganate(1-) deriv.

1-Thia-4,7,10-triazacyclododecane-4,7,10-triacetic acid, manganese complex CN

C14 H22 Mn N3 O6 S . H MF

CCS CI

CA SR

CA, CAPLUS, TOXCENTER, USPATFULL STN Files: LC

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 111:233674 REFERENCE

L18 ANSWER 42 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN
RN 122596-98-9 REGISTRY
CN Gadolinium, [1-thia-4,7,10-triazacyclododecane-4,7,10-triacetato(3-)-N4,N7,N10,O4,O7,O10,S1]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

1-Thia-4,7,10-triazacyclododecane, gadolinium deriv. CN

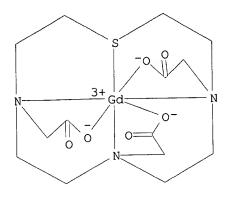
1-Thia-4,7,10-triazacyclododecane-4,7,10-triacetic acid, gadolinium CN complex

C14 H22 Gd N3 O6 S MF

CCS CI

CA SR

STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC



1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 111:233674

ANSWER 43 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

101348-83-8 REGISTRY RN

Copper, diaqua[.mu.-[[N,N'-(thiodi-2,1-ethanediyl)bis[N-CN

(carboxymethyl)glycinato]](4-)-N,O,ON,S:N',O',ON',S]]di-, trihydrate (9CI)

(CA INDEX NAME)

OTHER CA INDEX NAMES:

Glycine, N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, copper CN

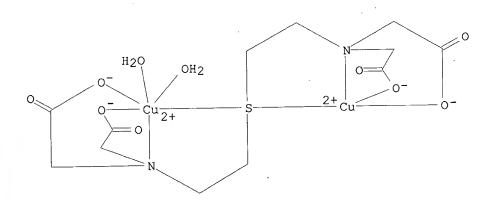
complex

C12 H20 Cu2 N2 O10 S . 3 H2 O MF

CI ·CCS

SR CA

STN Files: CA, CAPLUS LC



●3 H20

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 104:218052 REFERENCE

L18 ANSWER 44 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

RN 95294-14-7 REGISTRY

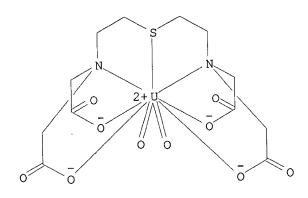
Audet 734583-bridge

Uranium, dioxo[dihydrogen [thiobis(ethylenenitrilo)]tetraacetato]- (7CI) CN (CA INDEX NAME)

C12 H16 N2 O10 S U . 2 H MF

CI CCS

CA, CAOLD, CAPLUS STN Files: LC



H+

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

1: 62:36434 REFERENCE

L18 ANSWER 45 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

71031-50-0 REGISTRY RN

Chromate(2-), aqua[.mu.-[[N,N'-(thiodi-2,1-ethanediyl)bis[N-CN (carboxymethyl)glycinato]](4-)-N,N',O,O',ON:ON']][[N,N'-(thiodi-2,1ethanediyl)bis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON]di- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

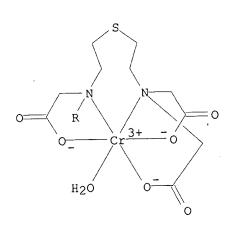
Glycine, N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, chromium CN complex

C24 H34 Cr2 N4 O17 S2 MF

CCS CI.

STN Files: CA, CAPLUS, TOXCENTER LC

PAGE 1-A



PAGE 2-A

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 91:133280 REFERENCE

L18 ANSWER 46 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN

70983-10-7 REGISTRY RN

CN (carboxymethyl)glycinato]](4-)-N,N',O,O',ON,S]-, hydrogen, (OC-6-23)-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Glycine, N, N'-(thiodi-2, 1-ethanediyl)bis[N-(carboxymethyl)-, chromium CN complex

C12 H16 Cr N2 O8 S . H MF

CI

STN Files: CA, CAPLUS, TOXCENTER LC

● H +

2 REFERENCES IN FILE CA (1947 TO DATE) 2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 92:84850

2: 91:133280 REFERENCE

ANSWER 47 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

70983-09-4 REGISTRY RN

 $\label{lem:chromate} \begin{tabular}{ll} Chromate(1-), aqua[[N,N'-(thiodi-2,1-ethanediyl)bis[N-ethanediyl)bis[N-ethanediyl]] & this is the context of the$ CN (carboxymethyl)glycinato]](4-)-N,N',O,O',ON]-, hydrogen (9CI) (CA INDEX NAME)

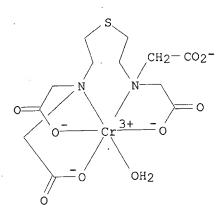
OTHER CA INDEX NAMES:

Glycine, N,N'-(thiodi-2,1-ethanediyl)bis[N-(carboxymethyl)-, chromium complex

C12 H18 Cr N2 O9 S . H MF

CCS CI

STN Files: CA, CAPLUS, TOXCENTER LC



● H+

2 REFERENCES IN FILE CA (1947 TO DATE)

2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 92:84850 REFERENCE

2: 91:133280 REFERENCE

ANSWER 48 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

16871-74-2 REGISTRY RN

Zirconium, [[thiobis(ethylenenitrilo)]tetraacetato]- (8CI) (CA INDEX CN NAME)

C12 H16 N2 O8 S Zr MF

CI CCS

STN Files: CA, CAPLUS LC

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 67:17469 REFERENCE

ANSWER 49 OF 49 REGISTRY COPYRIGHT 2003 ACS on STN L18

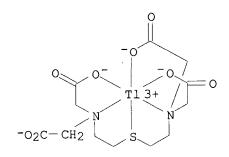
15977-96-5 REGISTRY RN

Thallium, [hydrogen [thiobis(ethylenenitrilo)]tetraacetato]- (8CI) (CA CNINDEX NAME)

C12 H16 N2 O8 S T1 . H MF

CCS CI

STN Files: CA, CAPLUS LC



1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 66:119393 REFERENCE

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 12:00:51 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

=>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> => d stat que 187 L20 42 SEA FILE=REGISTRY ABB=ON PLU=ON FWWKTFG/SOSP L22 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO? L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO? 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24 L25 L27 467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP L34 397 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND SQL>=7 L35 127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR MULTICHAI?) L36 46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 L37 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L24 L38 41 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L25 L43 15284 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YF].K[TVSC][GF]./SQSP L4415240 SEA FILE=REGISTRY ABB=ON PLU=ON L43 AND SQL>=7 L54 72 SEA FILE=REGISTRY ABB=ON PLU=ON L44 AND SQL=7 L55 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L54 L56 27 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND L24 L57 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L56 NOT (L25 OR L38) L69 2 SEA FILE=REGISTRY ABB=ON PLU=ON CFWWKTFG/SOSP L70 7 SEA FILE=HCAPLUS ABB=ON PLU=ON L69 L74 1 SEA FILE=REGISTRY ABB=ON PLU=ON FCFWWKTFG/SQSP L75 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L74 L78 33 SEA FILE=REGISTRY ABB=ON PLU=ON FCFWKTCF/SQSP L79 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L78 L80 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L79 NOT (L25 OR L38 OR L57 OR L75 OR L70) L82 279 SEA FILE=REGISTRY ABB=ON PLU=ON [FA]C.WK.C[GVF]FA|[FA]C.WK.C[FA]/SQSP L83 278 SEA FILE=REGISTRY ABB=ON PLU=ON L82 AND SQL>=8 102 SEA FILE=HCAPLUS ABB=ON PLU=ON L83 L84 L85 90 SEA FILE=HCAPLUS ABB=ON PLU=ON L84 AND L24 L86 64 SEA FILE=HCAPLUS ABB=ON PLU=ON L85 NOT (L25 OR L38 OR L57 OR L75 OR L70 OR L80) L87 47 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 AND PD<=DECEMBER 13, 2000

=> =>

=> d ibib abs hitrn 187 1-47

L87 ANSWER 1 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:894630 HCAPLUS

DOCUMENT NUMBER: 134:141903

TITLE: Identification and exploitation of structural foci

that influence conformational mobility in somatostatin agonists and antagonists

AUTHOR(S): Morgan, Barry; Anderson, Warren; Coy, David; Culler,

Michael; MacArthur, Malcolm; Mierke, Dale; Pellegrini, Maria; Piserchio, Andrea; Allee, Dean Sadat; Taylor,

John

CORPORATE SOURCE: Biomeasure, Inc., Milford, MA, 01757, USA

SOURCE: Peptides for the New Millennium, Proceedings of the

American Peptide Symposium, 16th, Minneapolis, MN,

United States, June 26-July 1, 1999 (2000),

Meeting Date 1999, 245-247. Editor(s): Fields, Gregg B.; Tam, James P.; Barany, George. Kluwer Academic

Publishers: Dordrecht, Neth.

CODEN: 69ATHX

DOCUMENT TYPE: Conference LANGUAGE: English

The somatostatin (ss) agonist BIM-23023, and the recently AB described somatostatin antagonist BIM-23454, have modest selectivity for hSSTR2 and the authors were interested in exploring the relationship between structure and function with respect to affinity for, and efficacy at alternative somatostatin receptor subtypes. The authors carried out a retrospective anal. on structural data from the Cambridge crystallog. database (CCD), and the Protein Database (PDB) for peptides contg. a CXXXXC fragment. The authors have also carried out structural studies using NMR methods on BIM-23023 and 23454 in both DMSO, and water contg. dodecylphosphocholine (DPC), and compared these structures to those obtained by crystallog. methods. The authors found that peptides contg. a CXXXXC sequence adopt a closely related series of "helix" conformations in the crystal state, and have found by NMR methods that this conformation is also adopted by SS agonists in aq. DPC media. The authors hypothesize that this event "primes" the peptide in a conformation appropriate for receptor binding. The authors find that an SS antagonist exists in multiple conformational states in DPC, and have shown that modification at the i+3 position of the .beta.-II' turn of this analog can reverse hSSTR2/5 selectivity and restore efficacy. conformational basis for this reversal of selectivity and restoration of agonist character is currently under investigation.

IT 51110-01-1D, Somatostatin, analogs 243470-86-2

, BIM 23454
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(identification and exploitation of structural foci that influence conformational mobility in **somatostatin** agonists and

antagonists)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 2 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:812949 HCAPLUS

DOCUMENT NUMBER: 134:13526

TITLE: Somatostatin receptor subtype-5 mediates

Audet 734583-claim 13

inhibition of peptide YY secretion from rat intestinal

cultures

AUTHOR(S):

Chisholm, Connie; Greenberg, Gordon R.

CORPORATE SOURCE:

Department of Medicine and Physiology, University of

Toronto, Toronto, ON, M5S 1A8, Can.

SOURCE:

American Journal of Physiology (2000),

279(5, Pt. 1), G983-G989 CODEN: AJPHAP; ISSN: 0002-9513 American Physiological Society

PUBLISHER:

Journal English

DOCUMENT TYPE: LANGUAGE:

Somatostatin-14 (S-14) and somatostatin-28 (S-28) bind AB to five distinct membrane receptors (SSTRs), but S-28 has higher affinity for SSTR-5. Whether S-28 acting through SSTR-5 regulates inhibition of peptide YY (PYY) secretion was tested in fetal rat intestinal cell cultures. S-28 and S-14 caused dose-dependent inhibition of PYY secretion stimulated by gastrin-releasing peptide, but S-28 was more potent than S-14 (EC50 0.04 vs. 13.2 nM). PYY was inhibited by two analogs with affinity for SSTR-5, BIM-23268 and BIM-23052, more potently than S-14 and as effectively as S-28. The SSTR-5 analog L-362855 suppressed PYY equiv. only to S-14, but the structurally related peptide L-372588 (Phe to Tyr at position 2) was equipotent to S-28, whereas L-372587 (Phe to Tyr at position 7) caused no inhibition. An SSTR-2 analog decreased PYY secretion similar to S-14, and an SSTR-3 analog was ineffective. PYY secretion stimulated by phorbol 12-myristate 13-acetate and by forskolin was also more potently suppressed by S-28 and the octapeptide SSTR-5 analogs. The results indicate that S-28 mediates inhibition of gastrin-releasing peptide-stimulated PYY secretion through activation of SSTR-5 and includes suppression of cAMP- and protein kinase C-dependent pathways. Substitution of a single hydroxyl group confers differences in SSTR-5 agonist properties, suggesting region specificity for the intrinsic activity of this receptor subtype.

IT **163687-44-3**, NC 8-12

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (somatostatin SSTR-5 receptor agonist structure-activity relations for inhibition of peptide YY secretion in rat intestinal cultures)

IΤ 51110-01-1, Somatostatin-14 75037-27-3, Somatostatin-28

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin-28 inhibition of gastrin-releasing

peptide-stimulated peptide YY secretion through activation of SSTR-5 includes suppression of cAMP- and protein kinase C-dependent pathways in rat intestinal cultures)

REFERENCE COUNT:

42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 3 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

1999:524735 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

131:295720

TITLE: Urethane-induced somatostatin mediated

> inhibition of gastric acid: reversal by the somatostatin 2 receptor antagonist, PRL-2903 Kawakubo, Keishi; Coy, David H.; Walsh, John H.;

AUTHOR(S): Tache, Yvette

CORPORATE SOURCE: CURE: Digestive Diseases Research Center, VA Medical

Center West Los Angeles, Department of Medicine,

Division of Digestive Diseases, UCLA, Los Angeles, CA,

90073, USA

SOURCE: Life Sciences (1999), 65(10), PL115-PL120

CODEN: LIFSAK; ISSN: 0024-3205

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

Urethane increases the release of somatostatin (SRIF) which AB inhibits gastric acid secretion. The SRIF monoclonal antibody, CURE.S6 and the novel sst2 antagonist, PRL-2903 injected i.v. at maximal EDs increased gastric acid secretion by 2 and 10 fold resp. from basal values within 30 min in urethane-anesthetized rats. Plasma gastrin levels were elevated 2.5 fold within 15 min by PRL-2903 (1.3 .mu.mol/kg, iv). These data indicate that the low gastrin and acid secretion levels induced by urethane result from endogenous SRIF acting on sst2 and that PRL-2903 is a valuable SRIF antagonist to assess sst2 mediated events.

ΙT 209006-12-2, PRL 2903

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(somatostatin 2 receptor mediation of somatostatin -induced gastrin-dependent inhibition of gastric acid secretion: PRL-2903 use as assessment tool)

51110-01-1, Somatostatin ΙT

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(somatostatin 2 receptor mediation of somatostatin

-induced gastrin-dependent inhibition of gastric acid secretion:

PRL-2903 use as assessment tool)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 4 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1999:396636 HCAPLUS

DOCUMENT NUMBER:

131:208607

TITLE:

Somatostatin receptor antagonists based on a mixed neuromedin B antagonist/somatostatin

agonist

AUTHOR(S):

Coy, David H.; Jain, Rahul; Murphy, William A.;

Rossowski, Wojciech J.; Fuselier, Joseph; Taylor, John

CORPORATE SOURCE:

Peptide Research Laboratories, Department of Medicine, Tulane University Medical Center, New Orleans, LA,

70112, USA

SOURCE:

Peptides: Frontiers of Peptide Science, Proceedings of the American Peptide Symposium, 15th, Nashville, June

14-19, 1997 (1999), Meeting Date 1997,

526-529. Editor(s): Tam, James P.; Kaumaya, Pravin T.

P. Kluwer: Dordrecht, Neth.

CODEN: 67UCAR DOCUMENT TYPE: Conference English

LANGUAGE:

The somatostatin-antagonizing activities are reported for 19 analogs of D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-NH2. The high potencies in this type of type-2 receptor-specific somatostatin antagonists reside in the use of optimized arom. amino acid structures in positions 1 and 8. It was thought that the ability of these side-chains to form .pi.-.pi. complexes might offer an explanation for these results. However, mol. modeling studies in progress on these octapeptides suggest little possibility that this occurs. The D-Cys2 residue appears to force rotation of the position 1 side chains so that they protrude in the opposite direction to agonist side-chains with the remainder of the mol. being little changed. This may be the reason for their antagonist properties.

IΤ 243470-73-7 243470-74-8 243470-75-9 243470-76-0 243470-77-1 243470-78-2 243470-79-3 243470-80-6 243470-81-7 243470-82-8 243470-83-9 243470-84-0

243470-85-1 243470-86-2 243470-87-3 243470-88-4 243470-89-5 243470-90-8

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (somatostatin receptor antagonists based on a mixed

neuromedin B antagonist/somatostatin agonist)

ΙT 51110-01-1D, Somatostatin, analogs

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(somatostatin receptor antagonists based on a mixed

neuromedin B antagonist/somatostatin agonist)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 5 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

5

ACCESSION NUMBER:

1999:282740 HCAPLUS

DOCUMENT NUMBER:

131:124917

TITLE:

SOURCE:

Highly Potent Cyclic Disulfide Antagonists of

Somatostatin

AUTHOR(S):

Hocart, Simon J.; Jain, Rahul; Murphy, William A.;

Taylor, John E.; Coy, David H.

CORPORATE SOURCE:

Peptide Research Laboratories, Tulane University School of Medicine, New Orleans, LA, 70112, USA

Journal of Medicinal Chemistry (1999),

42(11), 1863-1871

CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society

DOCUMENT TYPE:

Journal

PUBLISHER:

LANGUAGE: English

The search for synthetic analogs of somatostatin (SRIF) which exhibit selective affinities for the five known receptor subtypes (sst1-5) has generated a large no. of potent agonist analogs. Many of these agonists display good subtype selectivities and affinities for the subtypes 2, 3, and 5, with very few selective for sst1 or sst4. Until the recent report by Bass and co-workers (Mol. Pharmacol. 1996, 50, 709-715; erratum Mol. Pharmacol. 1997, 51, 170), no true antagonists of somatostatin had been discovered, let alone any displaying differential receptor subtype selectivity. In this present study, the authors further explore the effect of this putative L,5D6 antagonist motif on **somatostatin** octapeptide analogs with a cyclic hexapeptide core. The most potent antagonist found to date is H-Cpa-cyclo[DCys-Tyr-DTrp-Lys-Thr-Cys]-Nal-NH2, PRL-2970. which has an IC50 of 1.1 nM in a rat pituitary growth hormone in vitro antagonist assay vs. SRIF (1 nM). This analog bound to cloned human somatostatin subtype 2 receptors with a Ki of 26 nM. The highest hsst2 affinity analog was H-Cpa-cyclo[DCys-Pal-DTrp-Lys-Tle-Cys]-Nal-NH2, PRL-2915, with a Ki of 12 nM (IC50 = 1.8 nM). This analog was also selective for hsst2 over hsst3 and hsst5 by factors of 8 and 40, resp., and had no agonist activity when tested alone at concns. up to 10 .mu.M. Regression anal. of the binding affinities vs. the obsd. antagonist potencies revealed high correlations for hsst2 (r = 0.65) and hsst3 (r = 0.52) with a less significant correlation to hsst5 (r = 0.40). This is quite different from the somatostatin agonist analogs which show a highly significant correlation to hsst2 (r > 0.9). Receptor-selective somatostatin antagonists should provide valuable tools for characterizing the many important physiol. functions of this neuropeptide.

ΙT **9002-72-6**, Growth hormone

> RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(interaction with; structure-activity relationships of cyclic disulfide antagonists of somatostatin)

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205234-66-8P, DC 38-48 209005-80-1P 209005-81-2P
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       209005-82-3P 209005-83-4P 209005-84-5P
       209005-85-6P 209005-86-7P 209005-87-8P
       209005-88-9P 209005-89-0P 209005-90-3P
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       209006-12-2P 209006-13-3P 209006-14-4P
       209006-15-5P 209006-17-7P 209006-18-8P
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       230646-27-2P 230646-28-3P 230646-29-4P
       230646-30-7P 230646-31-8P
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); PNU (Preparation, unclassified); PRP (Properties);
      PUR (Purification or recovery); BIOL (Biological study); PREP
       (Preparation)
          (structure-activity relationships of cyclic disulfide antagonists of
         somatostatin)
 ΙT
      51110-01-1, Somatostatin
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (structure-activity relationships of cyclic disulfide antagonists of
         somatostatin)
 REFERENCE COUNT:
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                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
 L87 ANSWER 6 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER:
                         1998:788734 HCAPLUS
 DOCUMENT NUMBER:
                          130:47494
 TITLE:
                         Pure somatostatin antagonist and methods of
                         use thereof
 INVENTOR(S):
                         Bass, Roy Tyson; Buckwalter, Brian Lee; Hadcock, John
                         Richard; Patel, Bomi Pilloo; Chiarello, John Francis
 PATENT ASSIGNEE(S):
                         American Cyanamid Company, USA
 SOURCE:
                         U.S., 8 pp.
                         CODEN: USXXAM
 DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                  KIND DATE
                                        APPLICATION NO. DATE
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     US 5846934 A
                            19981208
                                        US 1997-801374
PRIORITY APPLN. INFO.:
                                                            19970219 <--
                                        US 1997-801374
                    MARPAT 130:47494
                                                          19970219
OTHER SOURCE(S):
     Somatostatin antagonist peptides that are selective for subtypes
     SSTR2 and SSTR5 are described. The present invention also relates to
     these peptides with increasing the release of growth hormone, insulin, and
     glucagon in mammals, and a method for the enhancement of growth.
     195520-39-9P 195520-40-2P 195520-42-4P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (peptidic somatostatin antagonists and effects on growth
       hormone, insulin and glucagon release)
    195520-46-8 195520-47-9
ΙT
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (peptidic somatostatin antagonists and effects on growth
       hormone, insulin and glucagon release)
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9002-72-6, Growth hormone 51110-01-1, TΥ Somatostatin

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(peptidic somatostatin antagonists and effects on growth

hormone, insulin and glucagon release)

REFERENCE COUNT: THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS 10 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 7 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER:

DOCUMENT NUMBER:

1998:750460 HCAPLUS

130:76579

TITLE:

Examination of **somatostatin** involvement in

the inhibitory action of GIP, GLP-1, amylin and adrenomedullin on gastric acid release using a new

SRIF antagonist analog

AUTHOR(S):

Rossowski, Wojciech J.; Cheng, Beng-L.; Jiang,

Ning-Y.; Coy, David H.

CORPORATE SOURCE:

Peptide Research Laboratories, Department of Medicine,

Tulane University School of Medicine, New Orleans, LA,

70112-2699, USA

SOURCE:

British Journal of Pharmacology (1998),

125(5), 1081-1087

CODEN: BJPCBM; ISSN: 0007-1188

PUBLISHER: Stockton Press

DOCUMENT TYPE: LANGUAGE:

Journal English

The effect of a new type 2 selective **somatostatin** (SRIF) receptor antagonist (DC-41-33) on somatostatin-induced

inhibition of pentagastrin-stimulated gastric acid secretion in conscious, chronic gastric fistula equipped rats was studied. Infused i.v., DC-41-33 dose-dependently inhibits SRIF-induced inhibition of pentagastrinstimulated gastric acid secretion with an IC50 of 31.6.+-.1.2 nmol kg-1 vs. 10 nmol kg-1 SRIF and blocks the inhibitory effects of SRIF when simultaneously co-infused. Its effectiveness provides addnl. evidence that SRIF-inhibition of gastric acid release is a SRIF type 2receptor-mediated process. DC-41-33 is able to completely reverse the inhibitory effect of glucose-dependent insulinotropic polypeptides, GIP and GIP-(1-30)NH2, and glucagon-like polypeptide, GLP-1(7-36)NH2, on pentagastrin-stimulated gastric acid secretion thus confirming that they exert these effects through stimulation of endogenous SRIF release. DC-41-33 only partially blocks potent amylin and adrenomedullin-induced inhibition of gastric acid secretion, therefore suggesting that somatostatin may not function as a primary mediator in the action of these peptides. The results indicate that DC-41-33, is a potent in vivo inhibitor of exogenous and endogenous SRIF in rats. It represents a new class of SRIF analogs which should eventually provide excellent tools for further evaluating the many physiol. roles of SRIF and its five

IΤ 51110-01-1, Somatostatin

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study);

(examn. of somatostatin involvement in inhibitory action of GIP, GLP-1, amylin and adrenomedullin on gastric acid release using a new SRIF antagonist analog DC-41-33)

IT 209006-12-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(examn. of somatostatin involvement in inhibitory action of GIP, GLP-1, amylin and adrenomedullin on gastric acid release using a new SRIF antagonist analog DC-41-33) 34

REFERENCE COUNT: THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS

Audet 734583-claim 13

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L87 ANSWER 8 OF 47
                     HCAPLUS COPYRIGHT 2003 ACS on STN
                         1998:394351 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         129:68033
TITLE:
                         Preparation of somatostatin antagonists
                         containing D-amino acids in the second position
INVENTOR(S):
                        Morgan, Barry; Murphy, William; Coy, David H.
                        Biomeasure Incorporated, USA; Administration of the
PATENT ASSIGNEE(S):
                         Tulane Educational Fund; Morgan, Barry; Murphy,
                        William; Coy, David H.
SOURCE:
                         PCT Int. Appl., 54 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
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                           _____
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     WO 9824807
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                           19980611
                                          WO 1997-US22251 19971204 <--
     WO 9824807
                     A3
                           19981015
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             KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,
             US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
            GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
            GN, ML, MR, NE, SN, TD, TG
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     US 6262229
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                                          AU 1998-76248
                                                           19971204 <--
     AU 728224
                      В2
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                                          EP 1997-949758
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         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
     BR 9714376
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     JP 2001505580
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                                          RU 1999-114018
                                                           19971204
PRIORITY APPLN. INFO.:
                                       US 1996-32358P
                                                       P 19961204
                                                       Α
                                       US 1996-760672
                                                           19961204
                                                        A2 19970513
                                       US 1997-855204
                                       WO 1997-US22251 W 19971204
OTHER SOURCE(S):
                       MARPAT 129:68033
GT
R^1
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R1 \A1-A2-A3-AA4-Lys-A6-A7-A8-R3 R2

AB The invention features somatostatin antagonists I [A1 = D- or L-amino acid residue, or is deleted; A2 = D-Cys, D-penicillamine (D-Pen), arom. D-amino acid, aliph. D-amino acid; A3 = arom. amino acid; A4 = Trp, D-Trp; A6 = Thr, Thr(CH2Ph), Gly, Ser, aliph. amino acid; A7 = Cys, Pen, arom. amino acid, aliph. amino acid; A7 = D- or L- Thr, D- or L-Ser, arom. D- or L-amino acid, aliph. D- or L-amino acid; R1, R2 = independently H, (un) substituted lower alkyl, aryl, aryl lower alkyl, heterocyclyl,

heterocyclyl lower alkyl, E1SO2, E1CO; E1 = aryl, aryl lower alkyl, heterocyclyl, heterocyclyl lower alkyl; R3 = OH, NH2, C1-12 alkoxy, NHYCH2Z; Y = C1-12 hydrocarbon moiety; Z = H, OH, CO2H, CONH2; or R3 and the carbonyl group of A8 are reduced to form H, lower alkyl, hydroxy lower alkyl; with provisos] having a D-amino acid at the second residue. Thus, H-.beta.-Nal-D-Cys-Pal-D-Trp-Lys-Val-Cys-.beta.-Nal-NH2 cyclic disulfide [II; .beta.-Nal = 3-(2-naphthyl)alanine; Pal = 3-(3-pyridyl)alanine] was prepd. by std. solid-phase methods on a benzhydrylamine-polystyrene resin using tert-butoxycarbonyl (Boc) N.alpha.-protection. II inhibited the in vitro release of growth hormone in a rat pituitary assay with IC50 = 0.01 51110-01-1, Somatostatin RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study) (antagonists; prepn. of D-amino acid-contg. somatostatin antagonists) 152045-42-6P 171894-24-9P 195520-46-8P 205234-58-8P 205234-59-9P 205234-60-2P 205234-61-3P 205234-63-5P 205234-65-7P 205234-66-8P 205234-67-9P 205234-68-0P 205234-69-1P 205234-70-4P 205234-71-5P 205234-72-6P 205234-73-7P 205234-74-8P 209005-80-1P 209005-81-2P 209005-82-3P 209005-83-4P 209005-84-5P 209005-85-6P 209005-86-7P 209005-87-8P 209005-88-9P 209005-89-0P 209005-90-3P 209005-91-4P 209005-93-6P 209005-95-8P 209005-97-0P 209005-99-2P 209006-01-9P 209006-02-0P 209006-03-1P 209006-04-2P 209006-05-3P 209006-07-5P 209006-08-6P 209006-09-7P 209006-10-0P 209006-11-1P 209006-12-2P 209006-13-3P 209006-14-4P 209006-15-5P 209006-17-7P 209006-18-8P 209006-19-9P 209006-20-2P 209006-21-3P 209006-22-4P 209006-23-5P 209006-24-6P 209006-32-6P 209006-33-7P 209006-34-8P 209006-35-9P 209006-36-0P 209006-37-1P 209006-38-2P 209006-43-9P 209006-44-0P 209006-45-1P 209006-46-2P 209006-47-3P 209006-48-4P 209006-49-5P 209006-50-8P 209006-59-7P 209006-60-0P 209006-62-2P 209006-64-4P 209006-65-5P 209006-66-6P 209006-67-7P 209006-68-8P 209006-76-8P 209006-77-9P 209006-78-0P 209006-79-1P 209006-83-7P 209006-84-8P 209006-85-9P 209006-86-0P 209006-87-1P 209006-88-2P 209006-89-3P 209006-90-6P 209006-91-7P 209006-92-8P 209006-94-0P 209006-95-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of D-amino acid-contg. somatostatin antagonists)

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L87 ANSWER 9 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN
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ACCESSION NUMBER: 1998:352409 HCAPLUS

DOCUMENT NUMBER:

129:23568

TITLE:

TΤ

ΙT

Long-term inhibitory effects of somatostatin and insulin-like growth factor 1 on growth hormone release by serum-free primary culture of pituitary

cells from European eel (Anguilla anguilla)

AUTHOR(S):

Rousseau, Karine; Huang, Yung-Sen; Le Belle, Nadine; Vidal, Bernadette; Marchelidon, Jacques; Epelbaum,

Jacques; Dufour, Sylvie

CORPORATE SOURCE:

Laboratoire Physiologie Generale Comparee, Museum National Histoire Naturelle, Paris, F-75231, Fr.

SOURCE:

LANGUAGE:

Neuroendocrinology (1998), 67(5), 301-309

CODEN: NUNDAJ; ISSN: 0028-3835

PUBLISHER: DOCUMENT TYPE:

S. Karger AG

Journal English

To investigate the ability of hypothalamic and peripheral factors to directly regulate growth hormone (GH) release in a primitive teleost, the European eel (A. anguilla), primary cultures of dispersed pituitary cells were used. When cultured for 12 days in a serum-free medium, pituitary cells continuously released large amts. of GH, which exceeded the initial cellular content. Somatotropin-release inhibiting hormone (SRIH-14) dose-dependently inhibited GH release (EC50 0.75 nM) .ltoreq.95%. No desensitization of somatotropes to SRIH was obsd. over the 12 days of culture. Use of receptor subtype-selective SRIH agonists suggests the existence on eel somatotropes of SRIH receptor(s) related to the mammalian sst2/sst3/ sst5 class rather than to the sst1/sst4 class. Insulin-like growth factor 1 (IGF1) dose-dependently inhibited GH release (EC50 0.03 nM) .ltoreq.85%, without desensitization. IGF1 and IGF2 were equipotent in inhibiting GH release, whereas insulin was 1000 .times. less active, suggesting the implication of a receptor related to the mammalian IGF type 1 receptor. These results indicate that eel somatotropes are active in vitro without any specific addnl. factors, and suggest the existence of a dominant inhibitory control of GH release in vivo. Two potential candidates for this chronic neg. regulation are a neurohormone, SRIH and a circulating factor, IGF1. These data underline the early evolutionary origin of the mol. and functional SRIH-GH-IGF1 neuroendocrine axis in vertebrates.

51110-01-1, Somatostatin 67763-96-6,

Insulin-like growth factor 1

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(in vitro regulation of eel GH release by somatostatin and IGF-I)

IT9002-72-6, Growth hormone

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(in vitro regulation of eel GH release by somatostatin and IGF-I)

75037-27-3, Somatostatin 28 111857-96-6, BIM IΤ 23042

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(inhibitory effects of somatostatin agonists on GH release by eel pituitary cells)

L87 ANSWER 10 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:169728 HCAPLUS

DOCUMENT NUMBER: 128:252501

TITLE: Potent Antagonists of Somatostatin:

Synthesis and Biology

AUTHOR(S): Hocart, Simon J.; Jain, Rahul; Murphy, William A.;

Taylor, John E.; Morgan, Barry; Coy, David H. Peptide Research Laboratories, Tulane University School of Medicine, New Orleans, LA, 70112, USA

SOURCE: Journal of Medicinal Chemistry (1998),

41(7), 1146-1154

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

The search for synthetic analogs of somatostatin (SRIF) which

exhibit selective affinities for the five known receptor subtypes (sst1-5) has generated a large no. of potent agonist analogs. Many of these agonists display good subtype selectivities and affinities for the subtypes 2, 3, and 5, with very few selective for sstl or sst4. Until the recent report by Bass and co-workers (Mol. Pharmacol. 1996, 50, 709-715; erratum, Mol. Pharmacol. 1997, 51, 170), no true antagonists had been discovered, let alone any displaying differential receptor subtype selectivity. In this present study, we explore the effect of this putative L5,D6 antagonist motif on various series of somatostatin agonist analogs, both linear and cyclic. It was found that many D5,L6 agonists could be converted into competitive antagonists by applying this motif, the most potent of which was H-Nal-cyclo[DCys-Pal-DTrp-Lys-Val-Cys]-Nal-NH2 (32). This antagonist was selective for hsst2 with an affinity of 75 nM and an IC50 of 15.1 nM against SRIF-14 in a rat in vitro antagonist bioassay. Receptor-selective somatostatin antagonists should provide valuable tools for characterizing the many important physiol. functions of this neuropeptide.

66610-31-9P, NC-11-31 152045-42-6P, DC-32-57 $I^{\cdot}T$ 152045-43-7P, DC-32-53 171894-24-9P, NC-8-61 205234-58-8P, DC-38-39 205234-59-9P, DC-38-35 205234-60-2P, DC-38-67 205234-61-3P, DC-38-64 205234-63-5P, JF-04-47 205234-65-7P, RJ-01-20 205234-66-8P, DC-38-48 205234-67-9P, DC-38-51 205234-68-0P, RJ-01-28 205234-69-1P, RJ-01-44 205234-70-4P, RJ-01-76 205234-71-5P, RJ-01-31 205234-72-6P, RJ-01-36 205234-73-7P, RJ-01-40 **205234-74-8P**, RJ-01-80

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and structure-activity relations of peptide

somatostatin antagonists)

9002-72-6, Growth hormone

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(release inhibition; prepn. and structure-activity relations of peptide somatostatin antagonists)

ANSWER 11 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1997:807093 HCAPLUS

DOCUMENT NUMBER:

128:110989

TITLE:

Species differences between male rat and ram pituitary

somatostatin receptors involved in the inhibition of growth hormone secretion

AUTHOR(S):

Briard, N.; Dutour, A.; Epelbaum, J.; Sauze, N.;

Slama, A.; Oliver, C.

CORPORATE SOURCE:

Laboratoire de Neuroendocrinologie Experimentale,

INSERM U297, Institut Federatif Jean Roche, Marseille,

13916, Fr.

SOURCE:

European Journal of Endocrinology (1997),

137(5), 545-555

BioScientifica

CODEN: EJOEEP; ISSN: 0804-4643

PUBLISHER: DOCUMENT TYPE:

Journal LANGUAGE: English

The sheep is a valuable model in which to study GH neuroregulation as its pattern of GH secretion is very close to that in humans. Furthermore, important differences in somatostatin (SRIH) action between rats and sheep have been found previously. The goal of this study was to compare in male rat and ram pituitaries the binding characteristics of somatostatin receptors and the effect of SRIH and 17 analogs on GH release. Using radioautog., SRIH binding was seen to be evenly distributed over the anterior pituitary of both species. In the binding

assay, binding sites were three times more concd. in rats than in sheep. Important interspecies differences in the action of SRIH and its analogs were found: they inhibited GH at lower concns. in rats than in sheep. Seven peptides displayed greater inhibitory ability in sheep than in rats while three were more potent in rats. Agonistic potencies to inhibit GH release in rats were correlated with somatostatin receptors subtype 2 (sst2) affinities. The data confirm and extend the quant. differences between rat and sheep in SRIH inhibitory action on GH secretion and confirm that ligand-binding properties of a given receptor subtype cannot be extrapolated across species.

51110-01-1, Somatostatin-14 75037-27-3, Somatostatin-28 77909-99-0 99341-94-3 111857-95-5, BIM 23034 111857-96-6, BIM 23042 135048-17-8 150155-55-8, BIM 23060

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(species differences between male rat and ram pituitary somatostatin receptors involved in inhibition of growth hormone secretion)

9002-72-6, Growth hormone ΤТ

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(species differences between male rat and ram pituitary somatostatin receptors involved in inhibition of growth hormone secretion)

REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 12 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

1997:589211 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 127:248422

TITLE: Preparation of peptide derivatives as

somatostatin antagonists and measurement of

their biological activities

Bass, Roy Tyson; Buckwalter, Brian Lee; Hadcock, John INVENTOR(S):

Richard; Patel, Bomi Pilloo; Chiarello, John Francis

American Cyanamid Company, USA PATENT ASSIGNEE(S):

SOURCE: Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE	
	EP 791603	A2	19970827		EP 1997-301092	19970220	<
	EP 791603	A3	19980812			193.0220	
	R: AT, BE,	CH, DE	, DK, ES,	FI,	FR, GB, GR, IE, I	T, LI, LU,	NL, PT, SE
	JP 09328499		19971222		JP 1997-46968	19970217	<
	CA 2197833	AA	19970821		CA 1997-2197833	19970218	<
	AU 9714800	A1	19970828		AU 1997-14800	19970220	<
	AU 721710	В2	20000713				
	ZA 9701483	A	19980820		ZA 1997-1483	19970,220	
F	PRIORITY APPLN. INFO	.:		U:	S 1996-604044 A	1996óg⁄20	102(0)
(THER SOURCE(S):	MA	RPAT_127:2	24842	2	/ /	•
I	AB Titled peptides	R1R2AA	1-cycld(D-	-Cys-	AA2-D-Trp-AA3-AA4	-Cys) -AA5-1	NH2 [R1 =
	R2 = H, C1-8 al	kyl, CO	R, CO2R wh	here :	R = C1-8 alkyl, (substitute	d) Ph,
					D am I amam al		

(substituted) naphthyl; AA1 = AA2 = D- or L-arom. .alpha.-amino acid; AA3 = D- or L-Arg, Lys, Orn, Cit (Citrulline); AA4 = Val, Leu, Ile, Abu (.alpha.-aminobutyric acid), Nle, Thr, 3-(alkyl)Ser, Thr(Bzl), Ser(Bzl) with the proviso that when AA4 = Thr then AA1 = L-isomer; AA5 = D- or L-

arom. .alpha.-amino acid, N-MeAla, N.alpha.-(alkyl)amino acid, Thr, Ser] were prepd. as **somatostatin** antagonists. H-p-NO2Phe-D-Cys-<u>Tyr</u>-D-Trp-Lys-Val-Cys-N.alpha.MeAla-NH2 was prepd. on a Millipore 9050 peptide synthesizer using PAL resin and std. Fmoc chem. The **somatostatin** antagonist activity of the above peptide in cyclized form was measured to be 3 (in a scale of 1-5 where 5 is the max. antagonist activity) in an yeast assay.

IT 195520-40-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and cyclization of)

IT 195520-42-4P 195520-46-8P 195520-47-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of peptide derivs. as **somatostatin** antagonists and measurement of their biol. activities)

IT 51110-01-1, Somatostatin

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(prepn. of peptide derivs. as **somatostatin** antagonists and measurement of their biol. activities)

IT 195520-39-9DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of peptide derivs. as **somatostatin** antagonists and measurement of their biol. activities)

L87 ANSWER 13 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:567970 HCAPLUS

DOCUMENT NUMBER: 127:229846

TITLE: Activation of human somatostatin receptor

type 2 causes inhibition of cell growth in transfected

HEK293 but not in transfected CHO cells

AUTHOR(S): Ren, J.; Bell, G.; Coy, D. H.; Brunicardi, F. C.

CORPORATE SOURCE: Department of Surgery, Baylor College of Medicine,

Houston, TX, 77030, USA

SOURCE: Journal of Surgical Research (1997), 71(1),

13-18

CODEN: JSGRA2; ISSN: 0022-4804

PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English

Somatostatin (SS) is known to have an antiproliferative effect AΒ on cell growth via somatostatin receptors (SSTR). The purpose of this study was to transfect cell lines with human SSTR2 and det. the subsequent effect on cell growth in response to SSTR agonist. Heterologous Chinese hamster ovary (CHO-K1) and human embryonic kidney 293 (HEK) cells were transfected with SSTR2 cDNA using lipofectin. Stable transformants were selected by G418 and confirmed by 125I-SS binding and RT-PCR. Binding studies were performed in the presence of 10-6 to 10-12 $\mbox{\it M}$ SS-14, SS-28, SS analog RC-160, SSTR2 agonist NC-9-74, and SSTR5 agonist DC-37-39. Cell growth was detd. by counting cell nos. after 48 h incubation in the presence of 10-6 to 10-12 M SSTR2 agonist NC-9-74. Binding of 125I-SS-14 to transfected CHO and transfected HEK293 cells showed that the cells had high affinity for SS-14, SS-28, NC-9-74, and RC-160 but low affinity for DC-37-39. Incubation with 10-6 to 10-12 M $\,$ NC-9-74, showed that 1 nM to 1 .mu.M NC-9-74 significantly inhibited transfected HEK293 cell growth but did not affect growth on transfected CHO cells (n = 4 for each dose, P < 0.01). The two cell lines transfected with the human SSTR2 showed similar high affinity for SS-14, SS-28, RC-160, and SSTR2 agonist but not SSTR5 agonist. The SSTR2 agonist NC-9-74 significantly inhibited transfected HEK293 cell growth but not CHO cells. These data suggest that activation of SSTR2 was more efficiently coupled to the signal transduction pathway of antiproliferation in the transfected HEK293 cells.

IT 51110-01-1, Somatostatin-14 75037-27-3,

Somatostatin-28 163687-44-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(activation of human somatostatin receptor type 2 causes

inhibition of cell growth in transfected HEK293 but not in transfected CHO cells)

L87 ANSWER 14 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:436397 HCAPLUS

DOCUMENT NUMBER: 127:131228

TITLE: Somatostatin inhibits gastrin release and

acid secretion by activating sst2 in dogs

AUTHOR(S): Lloyd, K. C. K.; Amirmoazzami, S.; Friedik, F.; Chew,

P.; Walsh, J. H.

CORPORATE SOURCE: Research and Medical Services, and CURE: Digestive

Diseases Res. Center, West Los Angeles Veterans Affairs Med. Cent., Los Angeles, CA, 90073, USA

SOURCE: American Journal of Physiology (1997),

272(6, Pt. 1), G1481-G1488 CODEN: AJPHAP; ISSN: 0002-9513 American Physiological Society

PUBLISHER: America:
DOCUMENT TYPE: Journal

LANGUAGE: English

AB Somatostatin is a potent inhibitor of gastrin-stimulated acid secretion by activation of somatostatin receptor type 2 (sst2)

secretion by activation of somatostatin receptor type 2 (sst2) in vivo, probably in part by blocking gastrin-stimulated histamine release from enterochromaffin-like cells expressing sst2. The authors propose that activation of sst2 may also regulate meal-stimulated acid secretion by blocking gastrin release from antral G cells. Using peptide analogs relatively selective for sst2 (NC-8-12), sst3 (BIM-23058), and sst5 (BIM-23052), the authors tested this hypothesis in two ways: first, in vivo by measuring plasma gastrin release during meal-stimulated acid secretion in dogs, and second, in vitro by measuring bombesin-stimulated qastrin release from an enriched culture of canine antral G cells. vivo, a low dose (0.05 nmol/kg/h) of NC-8-12 inhibited acid secretion 56% without blocking gastrin release. A higher dose (1 nmol/kg/h) of NC-8-12 abolished acid secretion and inhibited gastrin release by 61%, whereas the highest dose (5 nmol/kg/h) inhibited gastrin release by 84%. Only the highest doses (5 nmol/kg/h) of BIM-23058 and BIM-23052 significantly inhibited gastrin release and acid secretion. In vitro, NC-8-12 (10-9 M) reduced bombesin-stimulated gastrin release from antral G cells by 49%, whereas BIM-23058 and BIM-23052 were at least 100-fold less effective. These results indicate that somatostatin activation of sst2, but not sst3 or sst5, is the major pathway for somatostatin-induced inhibition of meal-stimulated gastrin release and acid secretion.

IT 51110-01-1, Somatostatin-14 163687-44-3,

NC-8-12

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(somatostatin inhibits gastrin release and acid secretion by activating sst2 receptors)

L87 ANSWER 15 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:327036 HCAPLUS

DOCUMENT NUMBER: 127:45199

TITLE: Colonic smooth muscle cells possess a different

subtype of somatostatin receptor from

gastric smooth muscle cells

AUTHOR(S): Corleto, V. D.; Severi, C.; Coy, D. H.; Fave, G.

Delle; Jensen, R. T.

CORPORATE SOURCE:

Digestive Diseases Branch, National Institute Diabetes and Digestive and Kidney Diseases, National Institutes

Health, Bethesda, MD, 20892, USA

SOURCE:

American Journal of Physiology (1997),

272(4, Pt. 1), G689-G697 CODEN: AJPHAP; ISSN: 0002-9513 American Physiological Society

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

Somatostatin (SS) alters colonic motility. To investigate whether SS has a direct effect on colonic smooth muscle cells, the authors prepd. isolated muscle cells from the descending guinea pig colon and compared the effects of SS with those on isolated gastric smooth muscle cells. In gastric cells, SS had no effect on carbachol-induced contraction, whereas in colonic cells it caused inhibition. In colonic muscle cells, SS-28 caused >85% inhibition of contraction by cholecystokinin octapeptide (CCK-8), bombesin, 12-0-tetradecanoylphorbol 13-acetate, and ionomycin, whereas it had no effect on contraction by these agents in gastric cells. In gastric cells, SS inhibited relaxation. Three synthetic SS analogs had different relative affinities for causing effects in gastric and colonic cells. Pertussis toxin inhibited the action of SS-28 in each muscle cell type by 50-75%. SS-28 alone had a small contractile effect on cells from the circular layer of the colon. SS-28 inhibited carbachol-induced contraction in colonic cells from both the longitudinal and circular layers. These results demonstrate that the action of SS differs in colonic and gastric smooth muscle cells. SS inhibits contractants in colonic cells and relaxants in gastric cells. colonic cells, SS has a weak contractile effect due to an effect on circular muscle cells and an inhibitory effect on cells from both longitudinal and circular layers. A different SS receptor subtype mediates the actions of SS in colonic and gastric muscle cells. In both cell types, the actions of SS are mediated by pertussis toxin-sensitive and -insensitive G proteins.

51110-01-1, Somatostatin-14 75037-27-3,

Somatostatin-28 163687-44-3

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(colonic smooth muscle cells possess a different subtype of somatostatin receptor from qastric smooth muscle cells)

L87 ANSWER 16 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

CORPORATE SOURCE:

1996:695906 HCAPLUS

DOCUMENT NUMBER:

126:26918

TITLE:

Somatostatin-based neuromedin B receptor

antagonists: Dissociation of neuromedin B and

somatostatin receptor binding

AUTHOR(S):

Coy, D. H.; Jiang, N. -Y.; Taylor, J. E.

Medical Center, Tulane University, New Orleans, LA,

70112, USA

SOURCE:

Peptides: Chemistry, Structure and Biology,

Proceedings of the American Peptide Symposium, 14th,

Columbus, Ohio, June 18-23, 1995 (1996),

Meeting Date 1995, 344-345. Editor(s): Kaumaya,

Pravin T. P.; Hodges, Robert S. Mayflower Scientific:

Kingswinford, UK. CODEN: 63NTAF

DOCUMENT TYPE:

Conference

LANGUAGE:

English

Cyclic somatostatin octapeptide analogs with replacement of Lys in position 5 by Orn exhibited good retention of neuromedin B receptor affinity but >50-fold loss of SRIF receptor affinity on transfected cells and SSTR2 receptors on pancreatic AR42J cells. Further side-chain

Audet 734583-claim 13

shortening by another CH2 using .alpha.,.gamma.-diaminobutyric acid substitution was even more successful in dissocg. affinities since SRIF receptor affinity decreased by >1000-fold. Necessity for a basic group in the side-chain was apparent from the loss of affinity with an ALA substitutes analog but retention of binding with an Arg substitution. All active peptides were able to block NMB-stimulated inositol phosphate prodn. with IC50 values in good agreement with binding data and all had little affinity for the bombesin/GRP receptor.

IT 38916-34-6, Somatostatin 51110-01-1D,

Somatostatin-14, cyclic analogs 120796-15-8

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP

(Properties); BIOL (Biological study); PROC (Process)

(somatostatin-based neuromedin B receptor antagonists with dissocn. of neuromedin B and somatostatin receptor binding)

L87 ANSWER 17 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:695866 HCAPLUS

DOCUMENT NUMBER: 126:14869

TITLE: Potent somatostatin analogs containing

N-terminal modifications

AUTHOR(S): Kim, S. H.; Dong, J. Z.; Gordon, T. D.; Kimball, H.

L.; Moreau, S. C.; Moreau, J.-P.; Morgan, B. A.;

Murphy, W. A.; Taylor, J. E.

CORPORATE SOURCE: Biomeasure, Inc., Milford, MA, 01757, USA

SOURCE: Peptides: Chemistry, Structure and Biology,

Proceedings of the American Peptide Symposium, 14th,

Columbus, Ohio, June 18-23, 1995 (1996),

Meeting Date 1995, 241-243. Editor(s): Kaumaya,

Pravin T. P.; Hodges, Robert S. Mayflower Scientific:

Kingswinford, UK. CODEN: 63NTAF

DOCUMENT TYPE: Conference LANGUAGE: English

AB The clin. utility of somatostatin analogs such as Octreotide and Lanreotide is now well established. Recent reports on the improved bioavailability of various peptides with certain N- or C-terminal modifications prompted us to investigate the discovery of a second generation of somatostatin analogs with greater potency in vivo.

Our efforts were focused on N-terminal modification of cyclic octapeptides

related to somatostatin. We now report the design, synthesis,

and aspects of the in vitro and in vivo activities of these analogs.

TT 51110-01-1, Somatostatin 150155-55-8,

BIM-23060 **182494-55-9**, BIM 23167 **182494-57-1**, BIM 23179 **182494-59-3**, BIM 23201 **184356-62-5**, BIM 23180

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); PRP (Properties); BIOL (Biological study) (potent somatostatin analogs contg. N-terminal modifications)

L87 ANSWER 18 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:563655 HCAPLUS

DOCUMENT NUMBER: 125:276578

TITLE: Ascorbic acid, tris, and piperazine peptide

derivatives as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents

INVENTOR(S): Kim, Sun H.; Keyes, Susan R.; Moreau, Sylviane; Dong,

Zheng X.; Taylor, John

PATENT ASSIGNEE(S): Biomeasure, Inc., USA

SOURCE: U.S., 45 pp., Cont.-in-part of U.S. 104,194,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 5552520		19960903	US 1994-287957 19940809 <
CA 2168113		19950216	CA 1994-2168113 19940808 <
CA 2168113		20021001	
HU 73491		19960828	HU 1996-281 19940808 <
CN 1133047		19961009	CN 1994-193717 19940808 <
CN 1055700	В	20000823	
SG 75092	A1	20000919	SG 1996-5779 19940808 <
EP 1288223		20030305	EP 2002-26862 19940808
R: AT, BE	CH, DE	, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI		20020205	
EF 1200224	AI	20030305	EP 2002-26863 19940808
R: AT, BE	CH, DE	DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI		10050606	
ZA 9405966	A	19950626	ZA 1994-5966 19940809 <
LT 4078	В	19960725	LT 1996-25 19960306 <
LV 11549		19970420	LV 1996-71 19960308 <
CZ 289590		20020213	CZ 2000-1032 20000322
CZ 289552		20020213	CZ 2000-1033 20000322
PRIORITY APPLN. INFO) .:		US 1993-104194 B2 19930809
			EP 1994-924590 A3 19940808
OTHER SOURCE(S): GI	MAF	RPAT 125:2	76578

O — (CH2)3CO-D-Nal-Cyclo-[Cys-Tyr-D-Trp-Lys-

Val-Cys]-Thr-NH2

AB A peptide deriv. is claimed, consisting of: a biol. active peptide having a free amino group, and at least one substituent attached to said peptide selected from the group consisting of I-III wherein: for I, R0 is, e.g., O, S; each R1 and R2 is independently H, (CH2)mOR6, or CH(OR7)CH2OR8, wherein R6 is H or (C2-C7) acyl, and each R7 and R8, independently, is, e.g., H, (C2-C7) acyl; m is an integer between 1 and 5, inclusive; one of R3 and R4 is (CH2)nR12 or (CH2)nCH(OH)R12, wherein R12 is CO, CH2 or SO2, and n is an integer between 1 and 5, inclusive; and the other of R3 and R4

IV

is H, (C1-C6) hydroxyalkyl, or (C2-C7) acyl; for II, each R13, R14, and R15, independently, is H or (C2-C24) acyl; R16 is NH or absent; R17 is CO, O, or absent; R18 is CO, CH2, SO2, or absent; m is an integer between 1 and 5, inclusive; n is an integer between 1 and 5, inclusive; for III, R19 is, e.g., H, NH2, an arom. functional group, OH; R20 is O or absent; R21 is (C1-C6) alkyl or absent; R22 is N, O, C, or CH; R23 is (C1-C6) alkyl or absent; R24 is N, CH, or C; R25 is NH, O, or absent; R26 is S02, CO, or CH2; m is an integer between 0 and 5, inclusive; n is an integer between 0 and 5, inclusive; p is an integer between 0 and 5, inclusive; and q is an integer between 0 and 5, inclusive; wherein said peptide is attached to said substituent at R12, R18, or R26 via an amide, amino, or sulfonamide Thus, e.g., amide coupling of D-Nal-Cyclo-[Cys-Tyr-D-Trp-Lys(BOC)-Val-Cys]-Thr-NH2 (prepn. given) with 3-0-(carboxypropyl)-5,6isopropylideneascorbic acid (prepn. given) followed by deprotection afforded somatostatin deriv. IV (BIM-23118) which exhibited IC50 = 0.30 nM for binding to the **somatostatin** receptor and antiproliferative activity (cell growth = 61.0% of control after 8 days) at 100 nM using rat pancreas tumor cells vs. 91.3 and 98.0% of control, resp., for SRIF-14 and SRIF-28 (unmodified somatostatin analogs). Data are also presented for bombesin binding assay of a bombesin analog, inhibition of release of growth hormone by somatostatin analogs (in which all derivs. demonstrate a surprising prolonged duration of action which decreases in a time-dependent fashion), and thymidine uptake stimulation by bombesin analogs.

182494-52-6P, BIM 23183 182494-55-9P, BIM 23167 IT182494-57-1P, BIM 23179 182494-59-3P, BIM 23201 182494-61-7P, BIM 23191

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

ΙT 9002-72-6, Growth hormone

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

ΙT 182482-16-2

RL: RCT (Reactant); RACT (Reactant or reagent) (ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

IT 182482-17-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(ascorbic acid, tris, and piperazine peptide derivs. as antitumor, growth hormone release inhibiting, and thymidine uptake stimulating agents)

L87 ANSWER 19 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1996:544511 HCAPLUS

DOCUMENT NUMBER: TITLE:

125:257040

Improved analogs and novel delivery systems for

somatostatin octapeptides

AUTHOR(S):

Moreau, J.-P.; Kim, S.; Dong, J. Z.; Ignatious, F.; Jackson, S.; Moreau, S. C.; Morgan, B. A.; Touraud,

F.; Taylor, J. E.; et al.

CORPORATE SOURCE:

SOURCE:

Biomeasure Inc., Milford, MA, 01757-3650, USA Metabolism, Clinical and Experimental (1996

), 44(8, Suppl. 1), 24-26

Audet 734583-claim 13

CODEN: METAAJ; ISSN: 0026-0495

PUBLISHER: Saunders DOCUMENT TYPE: Journal LANGUAGE: English

Appropriate N-terminus modification can result in somatostatin (SRIF) octapeptide analogs that are both more potent and more selective in vitro for the human SRIF receptor type 2 (hsst2). In addn., these modifications can improve the duration of action and bioavailability of SRIF analogs following parenteral administration, as shown by both pharmacol. and distribution studies in vivo with BIM-23190 and BIM-23197 in the rat.

38916-34-6, Somatostatin (sheep) 51110-01-1D, IT Somatostatin, analogs 150155-55-8, BIM-23060

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (improved analogs and novel delivery systems for somatostatin octapeptides)

ANSWER 20 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:528369 HCAPLUS

DOCUMENT NUMBER: 125:212818

TITLE: Identification of ligand binding determinants in the

somatostatin receptor subtypes 1 and 2 AUTHOR(S):

Liapakis, George; Fitzpatrick, Daniel; Hoeger, Carl;

Rivier, Jean; Vandlen, Richard; Reisine, Terry Dep. Pharmacol., Univ. Pennsylvania Sch. Med.,

Philadelphia, PA, 19104, USA SOURCE:

Journal of Biological Chemistry (1996),

271(34), 20331-20339

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

Biology

'DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

The somatostatin (SRIF) receptors (SSTRs) 1 and 2 bind SRIF and SRIF 28 with high affinity, although a no. of synthetic hexapeptide and octapeptide analogs of SRIF bind selectively to SSTR2. Extracellular loop three and its adjoining trans-membrane-spanning regions contain elements essential for the binding of such analogs to murine SSTR2. In particular, a stretch of amino acids from residues 294-297 (FDFV) in murine SSTR2 in trans-membrane domain seven can det. affinity for the SSTR2-selective analogs. Within this region, Phe294 has previously been predicted to be essential for the binding of octapeptides (Kaupmann, K., et al, 1995). based on the observation that SSTR1 can bind the octapeptide SMS-201-995 with reasonable affinity after a Ser-to-Phe conversion in the analogous region of this receptor (SSTR1S305F). We find that SSTR1S305F has low affinity for a no. of SSTR2-selective hexapeptides, suggesting that these analogs have different binding requirements than SMS-201-995. A correlation is seen between the ability of SSTR1S305F to bind hexapeptide analogs and the presence of a phenylalanine, but not tyrosine, at position two in these small cyclic mols. Thus, a single hydroxyl group in hexapeptides can play a crit. role in detg. receptor binding to these receptor mutants. We also find that the second extracellular loop of SSTR1 is important for the selectivity of certain SRIf agonists for binding to SSTR1. Taken together, our data indicate that there are multiple elements in the somatostatin receptors that can det. the binding affinity and selectivity of peptide analogs.

51110-01-1, Somatostatin-14 73032-94-7, Somatostatin-28 (sheep) 150155-58-1, NC 4-28B 163687-44-3, NC 8-12

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process) (ligand binding determinants in somatostatin receptor subtypes 1 and 2)

L87 ANSWER 21 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

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1996:462531 HCAPLUS
   DOCUMENT NUMBER:
                             125:105869
   TITLE:
                             Neuromedin B receptor antagonists
   INVENTOR(S):
                             Coy, David H.; Taylor, John E.
   PATENT ASSIGNEE(S):
                             Administrators of the Tulane Educational Fund, USA;
                             Biomeasure, Inc.
   SOURCE:
                             PCT Int. Appl., 22 pp.
                             CODEN: PIXXD2
  DOCUMENT TYPE:
                             Patent
  LANGUAGE:
                             English
  FAMILY ACC. NUM. COUNT:
  PATENT INFORMATION:
       PATENT NO.
                       KIND DATE
                                             APPLICATION NO. DATE
                               -----
                                               -----
       WO 9617617
                               19960613
                         A1
                                               WO 1995-US15808 19951207 <--
           W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
           RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
               IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
               NE, SN, TD, TG
       US 5569741
                               19961029
                         Α
                                               US 1994-352392
                                                                 19941208 <--
       AU 9644740
                         A1
                               19960626
                                               AU 1996-44740
                                                                19951207 <--
       AU 715759
                         В2
                               20000210
       JP 10510268
                         T2
                               19981006
                                               JP 1995-517725
                                                                19951207 <--
       EP 1011716
                         A1
                               20000628
                                              EP 1995-943375
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 PRIORITY APPLN. INFO.:
                                           US 1994-352392
                                                             A2 19941208
                                           US 1992-919537
                                                           B2 19920727
                                           US 1993-78419
                                                             A2 19930617
                                           WO 1995-US15808 W 19951207
      Cyclic octapeptides, including D-Nal-Cys-Tyr-D-Trp-X-Val-Cys-Nal-NH2
 AΒ
      (where X = Dab, Orn, or Arg) and analogs thereof, acted as neuromedin B
      receptor antagonists in the inhibition of neuromedin B-induced appetite
      suppression in rats and inositol phosphate turnover in BALB-3T3
      fibroblasts transfected with rat neuromedin B receptor.
      51110-01-1, Somatostatin-14
 ΙT
      RL: BSU (Biological study, unclassified); BIOL (Biological study).
         (cyclic octapeptide neuromedin B receptor antagonist binding by
         gastrin-releasing peptide and somatostatin receptors)
      179188-76-2P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation)
         (cyclic octapeptide neuromedin B receptor antagonist prepn. and biol.
        activity)
L87 ANSWER 22 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                          1996:275100 HCAPLUS
DOCUMENT NUMBER:
                          125:34167
TITLE:
                          Octapeptide analogs of somatostatin having
                          threonine at the sixth position as
                          growth-hormone-release inhibitors
INVENTOR(S):
                          Coy, David H.; Murphy, William A.
PATENT ASSIGNEE(S):
                          The Administrators of the Tulane Educational Fund, USA
SOURCE:
                          U.S., 4 pp., Cont.-in-part of U.S. Ser. No. 447,876,
                          abandoned.
                          CODEN: USXXAM
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DOCUMENT TYPE:

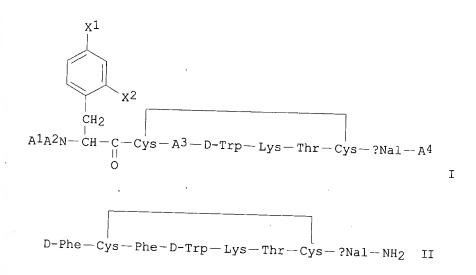
Patent

LANGUAGE:

English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5506339 CA 2046594 HU 59166 AT 140237 ES 2091907 JP 2925321 ZA 9009896 PRIORITY APPLN. INFO.: GI		19960409 19910609 19920428 19960715 19961116 19990728 19910925 US	US 1992-840621 CA 1990-2046594 HU 1991-2648 AT 1991-901181 ES 1991-901181 JP 1990-501584 ZA 1990-9896 1989-447876	19920221 < 19901204 < 19901204 < 19901204 < 19901204 < 19901204 < 19901210 < 19891208



This invention provides title compds. I wherein each Al and A2, AΒ independently, is H, C1-12 alkyl, C7-10 phenylalkyl, R1CO (where R1 is C1-20 alkyl, C3-20 alkenyl, C3-20 alkynyl, Ph, naphthyl, or C7-10 phenylalkyl), or R2OCO (where R2 is C1-10 alkyl or C7-10 phenylalkyl), provided that when one of A1 or A2 is R1CO or R2OCO, the other must be H; each X1 and X2, independently, is H, F, C1, Br, OH, CH3, or CF3, provided that at least one of X1 and X2 must be H; A3 is Phe or Tyr; and A4 is OH, NH2, or NHR3 (wherein R3 is a satd. aliph. C1-8 alkyl); unless the D-stereoisomer of an amino acid (other than .beta.Nal) is specified, the L-form is assumed; .beta.-Nal denotes D- or L-.beta.-naphthylalanine; or a pharmaceutically acceptable salt thereof, possessing growth-hormonerelease-inhibiting activity (no data). The solid-phase synthesis of octapeptide II is described. ΙT

138248-86-9P 138248-87-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(octapeptide analogs of somatostatin having threonine at the sixth position as growth-hormone-release inhibitors)

ΙT 9002-72-6, Growth hormone 51110-01-1,

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL

(Biological study)

(octapeptide analogs of somatostatin having threonine at the sixth position as growth-hormone-release inhibitors)

L87 ANSWER 23 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

1996:89572 HCAPLUS

124:136089

TITLE:

SOURCE:

Intracerebroventricular injection of

somatostatin sst5 receptor agonist inhibits

gastric acid secretion in rats

AUTHOR(S):

Martinez, Vicente; Coy, David H.; Lloyd, K. C. Kent;

CORPORATE SOURCE:

Tache, Yvette CURE: Digestive Diseases Research Center, VA Medical

Center, Department of Medicine and Brain Research

Institute, UCLA, Los Angeles, CA, 90073, USA European Journal of Pharmacology (1996),

296(2), 153-60 CODEN: EJPHAZ; ISSN: 0014-2999

PUBLISHER: DOCUMENT TYPE:

Elsevier Journal

LANGUAGE: English

Somatostatin and its analogs act in the brain to influence gastric acid secretion. Five different somatostatin receptor subtypes have been characterized (sstl to sst5). We studied the influence of somatostatin (0.18-0.6 nmol/rat) and selective sst2, sst3 and sst5 receptor ligands on basal gastric acid secretion in conscious rats equipped with chronic gastric and intracerebroventricular (i.c.v.) cannulae. Somatostatin-14 (0.36 nmol/rat), the sst2, sst3 and sst5 receptor agonist, Des-AA1, 2, 4, 5, 12, 13-[D-Trp8, D-Cys14] somatostatin (SMS 201-995) (0.18-0.36 nmol/rat) and the sst5 receptor agonist, BIM-23052, (0.8-1.2 nmol/rat) injected i.c.v. inhibited gastric acid secretion. Maximal inhibition reaching 42%, 60% and 42% was induced by somatostatin-14 (0.36 nmol/rat), SMS 201-995 (0.18 nmol/rat) and BIM-23052 (0.8 nmol/rat), resp. The sst2 receptor agonist, DC 32-87 (0.2-0.8 nmol/rat) and sst3 receptor agonist, BIM-23056 (0.2-1.2 nmol/rat), did not modify gastric acid secretion, except the sst3 receptor agonist at 0.4 nmol/rat which increased acid output at 20 min post-injection. The sst2 receptor agonists (0.4 nmol/rat) co-injected i.c.v with a subthreshold dose of sst5 agonist (0.4 nmol/rat) inhibited gastric acid secretion. These results show that i.c.v. injection of somatostatin-14 inhibits basal gastric acid secretion in conscious rats through an action on sst5 receptor subtype which can be potentiated by sst2 receptor subtype.

51110-01-1, Somatostatin-14 173484-74-7 ΙT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(somatostatin receptor subtypes involved in inhibition of gastric acid secretion)

ANSWER 24 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1995:966879 HCAPLUS

DOCUMENT NUMBER:

SOURCE:

124:75755

TITLE:

Morphine cross-reacts with **somatostatin**

receptor SSTR2 in the T47D human breast cancer cell

line and decreases cell growth

AUTHOR(S): Hatzoglou, Anastassia; Ouafik, L'Houcine; Bakogeorgou, CORPORATE SOURCE:

Efstathia; Thermos, Kyriaki; Castanas, Elias School Medicine, University Crete, Crete, GR-71110,

Cancer Research (1995), 55(23), 5632-6

CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: American Association for Cancer Research DOCUMENT TYPE:

Journal

LANGUAGE: English AΒ

In a previous study, we found that morphine decreases, in a dose-dependent manner, the cell growth of T47D human breast cancer cells, despite the lack of .mu. opioid receptors and an interaction of morphine with other opioid sites. We have therefore examd. a possible interaction of morphine with other membrane receptor systems of the cell. The present study describes for the first time an interaction between .mu.-acting opioid drugs and the somatostatinergic system. We have found that [125I] Tyrll-somatostatin binds with high affinity to T47D cells. Anal. of the binding data showed the presence of two components: one with high affinity but low capacity (Kd, $0.145~\mathrm{nM};~1450~\mathrm{sites/cell})$, and another of lower affinity but higher capacity (Kd, 1.192 nM; 11,920 sites/cell). Somatostatin-14 and somatostatin-28 showed multiphasic displacement curves, indicating heterogeneity of binding sites. The latter was confirmed by reverse transcription-PCR, with revealed the existence of the somatostatin receptor subtypes 2 and 3 (SSTR2 and SSTR3), with a relative mRNA concn. of 85 and 15%, resp. Morphine and the morphinomimetic peptide morphiceptine (Tyr-Pro-Phe-Pro-NH2) displace somatostatin from its binding sites. Further anal. indicated that .mu.-acting opioids interact with the SSTR2 receptor subtypes.

75037-27-3, Somatostatin-28 150957-55-4, BIM IT 23034C

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(morphine cross-reaction with somatostatin receptor SSTR2 in T47D human breast cancer cell line and inhibition of cell growth) 51110-01-1, Somatostatin

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(morphine cross-reaction with somatostatin receptor SSTR2 in T47D human breast cancer cell line and inhibition of cell growth)

L87 ANSWER 25 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1995:964957 HCAPLUS

DOCUMENT NUMBER:

124:46620 TITLE:

Neuromedin B receptor antagonists which demonstrate

selectivity

INVENTOR(S): Coy, David H.; Taylor, John E.

PATENT ASSIGNEE(S):

Biomeasure, inc., USA; Tulane Educational Fund. SOURCE: U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 919,537,

abandoneed.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

ΙT

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 606463 EP 606463	A 19951031 A1 19940203 CA, CZ, FI, HU, JP, NO, BE, CH, DE, DK, ES, FR, A1 19940720 B1 20011004	WO 1993-US7036 PL, PT, RU GB, GR, IE, IT, LU, EP 1993-918408	MC, NL, PT, SE 19930727 <
R: AT, JP 06511495 AU 672426 AU 9347871 AT 206307 ES 2162822 NO 9401123	BE, CH, DE, DK, ES, FR, T2 19941222 B2 19961003 A1 19940214 E 20011015 T3 20020116 A 19940325	AU 1993-47871 AT 1993-918408 ES 1993-918408	19930727 <

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US 5569741
                               19961029
                                              US 1994-352392
   PRIORITY APPLN. INFO.:
                                                               19941208 <--
                                           US 1992-919537 B2 19920727
                                           US 1993-78419
                                                            A 19930617
                                           WO 1993-US7036
                                                           W 19930727
   AB.
        Certain cyclic somatostatin octapeptide analogs functioned as
        neuromedin B receptor antagonists and had a >100-fold higher affinity for
        neuromedin B receptor than for gastrin-releasing peptide receptor. The
        most potent analog, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH2,
        inhibited binding of 125I-labeled [D-Tyr0]-neuromedin B to neuromedin B
       receptors on neuromedin B receptor transfected 3T3 cells (Kd 216 nM) and
       on glioblastoma C-6 cells (Kd 59 nM). Structure-activity studies on
       various related cyclic somatostatin octapeptide analogs
       indicated that stereochem. at positions 1, 2, 7, and 8, the hydrophobicity
       and ring size of the substitution in positions 1, 3, and 4, and the
       basicity of the group in position 5 all were important in detg. neuromedin
       38916-34-6D, Cyclic somatostatin, octapeptide analogs
  ΙT
       111857-96-6, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH2
       121715-54-6, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH2
       150155-55-8, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys-Thr-Cys)-Nal-NH2
       152045-39-1, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Nal-Cys)-Nal-NH2
       152045-40-4, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-D-Nal-NH2
       152045-41-5, Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-D-Nal-NH2
      152045-42-6, D-Nal-cyclo-(D-Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH2
152045-43-7, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-D-Cys)-Nal-NH2
      152045-45-9, D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Phe-Cys)-Nal-NH2
      152045-47-1, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys(iPr)-Thr-Cys)-Nal-NH2
      152045-48-2, D-Phe-cyclo-(Cys-Tyr-D-Trp-Lys(diethyl)-Thr-Cys)-Nal-
      NH2 171894-23-8 171894-24-9 171894-25-0
      RL: BAC (Biological activity or effector, except adverse); BPR (Biological
      process); BSU (Biological study, unclassified); PRP (Properties); BIOL
      (Biological study); PROC (Process)
(structure-activity of cyclic somatostatin octapeptide
         analogs as neuromedin B receptor antagonists)
 L87 ANSWER 26 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER:
                         1995:913632 HCAPLUS
 DOCUMENT NUMBER:
                          123:322111
 TITLE:
                          Somatostatin analog pharmaceuticals for
                          treating NSAID-induced gastrointestinal lesions or
                          ulcers
 INVENTOR(S):
                          Buchhiet, Karl-Heinz; Engel, Guenter; Gamse, Rainer
 PATENT ASSIGNEE(S):
                         Germany
SOURCE:
                         Can. Pat. Appl., 20 pp.
                         CODEN: CPXXEB
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                    KIND DATE
                                      APPLICATION NO. DATE
     -----
                                           _____
     CA 2142394 AA 19950815
                                           CA 1995-2142394 19950213 <--
                      A1 19950913 EP 1995-810088 19950210 <--
     EP 671413
        R: AT, BE, CH, DE, ES, FR, GB, IT, LI
     JP 07258108
                     A2 19951009
                                          JP 1995-23845
PRIORITY APPLN. INFO.:
                                                            19950213 <--
                                        GB 1994-2767
OTHER SOURCE(S):
                                                            19940214
                        MARPAT 123:322111
     Somatostatin analogs are used in the manuf. of pharmaceutical
     compns. for use in preventing or treating NSAID induced gastrointestinal
    lesions or ulcers. An example injectable compn. contained octreotide.
    51110-01-1D, Somatostatin, analogs 121715-54-6
IΤ
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170155-96-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (somatostatin analog pharmaceuticals for treating NSAID-induced gastrointestinal lesions or ulcers)

L87 ANSWER 27 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:806295 HCAPLUS

DOCUMENT NUMBER: 123:228909

Preparation of therapeutic peptide derivatives. TITLE: INVENTOR(S):

Kim, Sun Hyuk; Dong, Zhengxin; Taylor, John E.;

Moreau, Sylviane; Keyes, Susan Riley Biomeasure, Inc., USA

PATENT ASSIGNEE(S):

PCT Int. Appl., 47 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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DATE APPLICATION NO. DATE
    PATENT NO.
                KIND DATE
    WO 9504752 A1 19950216 WO 1994-US8875 19940808 <--
        W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB,
            GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW,
            NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN \,
        RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC,
            NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
                    AA 19950216
                                       CA 1994-2168113 19940808 <--
    CA 2168113
                    С
                         20021001
    CA 2168113
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A2 19960828
A 19961009
B 20000827
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    AU 9474819
                    A1 19950228
    AU 689490
                                      HU 1996-281
                                                        19940808 <--
    HU 73491
                                        CN 1994-193717
                                                        19940808 <--
    CN 1133047
    CN 1055700
    JP 09501177
                                        JP 1994-506541
                                                        19940808 <--
    EP 788509 A1
                        19970813
                                        EP 1994-924590
                                                        19940808 <--
                         20030528
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
    RU 2133252 C1 19990720 RU 1996-104340 19940808 <---
                                   SG 1990-37.3
PL 1994-312989
EP 2002-26862
    SG 75092
                                        SG 1996-5779
                                                        19940808 <--
                     A1
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    PL 180612
                          20010330
                                                        19940808
                     В1
    EP 1288223
                     A1
                          20030305
                                                        19940808
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT
                                      EP 2002-26863 19940808
                          20030305
    EP 1288224
                     A1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT
                                       AT 1994-924590
                E
A
                                                        19940808
    AT 241643
                          20030615
                         19950626
                                       ZA 1994-5966
                                                        19940809 <--
    ZA 9405966
                   A
    FI 9600584
                         19960208
                                       FI 1996-584
                                                        19960208 <--
                                       LT 1996-25
    LT 4078
                    В 19960725
                                                        19960306 <--
                                       LV 1996-71
    LV 11549
                    В
                         19970420
                                                        19960308 <--
                                       CZ 2000-1033 20000322 1993-10415
                                      CZ 2000-1032
              B6
B6
    CZ 289590
                          20020213
    CZ 289552
                          20020213
PRIORITY APPLN. INFO.:
                                     US 1993-104194 A 19930809
                                     EP 1994-924590 A3 19940808
                                     WO 1994-US8875 W 19940808
OTHER SOURCE(S): MARPAT 123:228909
```

$$Q1 = R1 \times R2 \times Q1 \times R30 \times R4 \times R30 \times R4 \times R24 \times R24$$

Peptide derivs. contg. .gtoreq.1 of Q1, Q2, Q3 [X = 0, S, NR5; R5 = H, AΒ alkyl; R1, R2 = H, (CH2)mOR6, CH(OR7)CH2OR8; R6, R13, R15 = H, acyl; R7, R8 = H, acyl, CR9R10; R9 = H, alkyl; R1R2 = :CHCH2OR11; R11 = H, acyl; m, n = 1-5; one of R3, R4 = (CH2) nR12, (CH2) nCH(OH) R12, the other = H, hydroxyalkyl, acyl; R12 = CO, CH2, SO2; R16 = HN, null; R17 = CO, O, null; $R\bar{1}8 = CO$, CH2, $S\bar{0}2$, null; p, q, r, s = 0-5; R19 = H, NH2, arom. functional group, OH, hydroxyalkyl, SO3H, null, etc.; R20 = O, null; R21 = alkyl, null; R22 = N, O, C, CH; R23 = alkyl, null; R24 = N, CH, C; R25 = NH, O, null; R26 = SO2, CO, CH2, null] attached to the peptide by a CO-N, CH2-N, or SO2-N bond, were prepd. Thus, somatostatin deriv (I) (soln. phase prepn. given) at 100 nM in AR42J pancreas tumor cells gave 66.4% control of cell growth.

9002-72-6DP, Somatotropin, derivs. 9034-39-3DP IT, Growth hormone releasing factor, derivs. 51110-01-1DP, Somatostatin, derivs. 168016-89-5P 168017-03-6DP

, derivs. RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of therapeutic peptide derivs.)

168017-01-4 ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (prepn. of therapeutic peptide derivs.)

HCAPLUS COPYRIGHT 2003 ACS on STN ANSWER 28 OF 47

1995:252000 HCAPLUS ACCESSION NUMBER:

122:46704

DOCUMENT NUMBER: Subtype selectivity of peptide analogs for all five TITLE:

cloned human somatostatin receptors (hsstr

Patel, Yogesh C.; Srikant, Coimbatore B. Fraser Lab., McGill Univ., Montreal, QC, H3A 1A1, Can. AUTHOR(S): CORPORATE SOURCE:

Endocrinology (1994), 135(6), 2814-17 CODEN: ENDOAO; ISSN: 0013-7227 SOURCE:

Endocrine Society PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

Recent reports (Raynor et al) have claimed the identification of potent somatostatin (SST) agonists exhibiting binding affinities of 1-2 pM and up to 30,000-fold binding selectivity for several of the 5 cloned sstr subtypes. These conclusions, however, are based on binding comparisons of sstr subtypes from different species expressed in different cell lines and studied with different radioligands. To eliminate the effect of species and/or methodol. variations, we have investigated agonist selectivity of 32 synthetic SST analogs for all 5 hsstrs stably expressed in CHO-K1 cells under identical binding conditions. We show that hsstr2, 3, 5 react potently with hexapeptide as well as cyclic and linear octapeptide analogs and belong to a similar sstr subclass. Hsstrl and 4 react poorly with these analogs and belong to a sep. subclass. present generation of SST analogs exhibit a modest .apprx. 50-fold increase in binding potency compared to SST-14 for 2 subtypes (hsstr2, 3), and relative selectivity for only 2 subtype (hsstr2) which is at best only 35- fold. The potency and degree of selectivity of these analogs is several orders of magnitude less than that reported earlier and suggests the need for caution in using these compds. as putative superagonists or subtype selective compds. for any of the individual sstrs.

51110-01-1, Somatostatin-14 58976-46-8, ΙT D-Trp8-somatostatin-14 75037-27-3, Somatostatin-28 77909-99-0, Leu8, D-trp22, tyr25somatostatin-28 111857-95-5, BIM 23034 111857-96-6, BIM 23042 150155-55-8, BIM 23060 150155-57-0, EC 5-21 150155-58-1, NC 4-28B

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(somatostatin receptor subtype selectivity of)

51110-01-1D, Somatostatin, analogs IT

RL: BPR (Biological process); BSŪ (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(somatostatin receptor subtype specificity of)

HCAPLUS COPYRIGHT 2003 ACS on STN L87 ANSWER 29 OF 47

1994:290830 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 120:290830

Neuromedin B receptor antagonists TITLE:

Coy, David H .; Taylor, John E. INVENTOR(S):

Administrators of the Tulane Educational Fund, USA; PATENT ASSIGNEE(S):

Biomeasure, Inc.

PCT Int. Appl., 41 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT NO.		KIND	DATE		APPLICATION NO. DATE	
WO	9402163			19940203	NO	WO 1993-US7036 19930727 <	
	W: AU, RW: AT,	CA, BE,	CZ, FI,	, DK, ES,	FR,	GB, GR, IE, IT, LU, MC, NL, PT, SE	
	5462926 606463			19951031 19940720		US 1993-78419 19930617 < EP 1993-918408 19930727 <	
	606463		B1			II MO NI DE CE	
	06511495	DD,	T2 B2	19941222 19961003		JP 1993-504762 19930727 < AU 1993-47871 19930727 <	
ΑU	672426 9347871		A1	19940214		AT 1993-918408 19930727	
	206307 9401123		E A	20011015 19940325		NO 1994-1123 19940325 <	

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PRIORITY APPLN. INFO.:
                                        US 1992-919537
                                                         A 19920727
                                                         A 19930617
                                        US 1993-78419
                                                        W 19930727
                                        WO 1993-US7036
OTHER SOURCE(S):
                         MARPAT 120:290830
     A method of selectively inhibiting biochem. activity of cells induced by
     neuromedin B comprises contacting cells which contain neuromedin B
     receptors with a cyclic octapeptide, D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-
     NH2 (I), or an analog thereof. Certain somatostatin octapeptide
     analogs function as neuromedin B receptor antagonists and have >100-fold
     higher affinity for neuromedin B receptors than for gastrin-releasing
     peptide receptors. The most potent analog, I, inhibited binding of
     radioiodinated [D-Tyr0] neuromedin B to receptors on neuromedin B
     receptor-transfected 3T3 cells (Kd 216 nM) and on glioblastoma C-6 cells
     (Dd 59 nM). Structure-function studies with I analogs indicated that the
     stereochem. at positions 1, 2, 7, and 8; the hydrophobicity and ring size
     of the substitution at positions 1, 3, and 4; and the basicity of the
     group at position 5 all were important in detg. receptor affinity.
IΤ
     154896-98-7 154897-00-4 154897-01-5
     154897-02-6 154897-03-7 154897-04-8
     154897-05-9 154897-09-3 154897-10-6
     154897-11-7 154897-12-8 154897-13-9
     154897-14-0
     RL: BIOL (Biological study)
        (somatostatin octapeptide analog, neuromedin B receptor
        antagonist activity of)
ΤТ
     154896-98-7
     RL: BIOL (Biological study)
        (somatostatin octapeptide, neuromedin B receptor antagonist
        activity of)
L87
    ANSWER 30 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                         1994:183172 HCAPLUS
DOCUMENT NUMBER:
                         120:183172
TITLE:
                         Inhibition of angiogenesis by somatostatin
                         and somatostatin-like compounds is
                         structurally dependent
AUTHOR(S):
                         Barrie, Rosemary; Woltering, Eugene A.; Hajarizadeh,
                         Homayon; Mueller, Charles; Ure, Tina; Fletcher,
                         William S.
CORPORATE SOURCE:
                         Dep. Surg., Oregon Health Sci. Univ., Portland, OR,
                         97201, USA
SOURCE:
                         Journal of Surgical Research (1993), 55(4),
                         446-50
                         CODEN: JSGRA2; ISSN: 0022-4804
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     The authors have previously demonstrated that somatostatin
     analogs SMS 201-995 and RC-160 inhibit angiogenesis using the
     chorioallantoic membrane (CAM) of the developing chicken embryo.
                                                                       In this
     study, the ability of native somatostatin-14 and 9
     somatostatin analogs to inhibit angiogenesis was evaluated.
    Methylcellulose disks (2 mm) contg. 50 .mu.g of somatostatin or
     somatostatin analog were implanted on the CAM of 6-7-day-old
     shell-less chick embryos. Inhibition of blood vessel growth was visually
     assessed and graded in the region of the disk 24-36 h following
     implementation. The analogs SMS 201-995 and RC-160 showed statistically
     significant inhibition of neovascularization when compared to native
     somatostatin-14. The amino acid homol. comparison of the 9
     analogs revealed that individual differences in their abilities to inhibit
     angiogenesis may be structurally dependent.
     51110-01-1, Somatostatin-14 111857-95-5, BIM
IΤ
```

RL: BIOL (Biological study)

(angiogenesis inhibition by, structure in relation to)

L87 ANSWER 31 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:46123 HCAPLUS

DOCUMENT NUMBER: 120:46123

TITLE: Discovery of a novel class of neuromedin B receptor

antagonists, substituted somatostatin

analogs

AUTHOR(S): Orbuch, Murray; Taylor, John E.; Coy, David H.;

Mrozinski, John E., Jr.; Mantey, Samuel A.; Battey, James F.; Moreau, Jacques Pierre; Jensen, Robert T. Dig. Dis. Branch, Natl. Inst. Diabetes Dig. Kidney

Dis., Bethesda, MD, 20892, USA

SOURCE: Molecular Pharmacology (1993), 44(4), 841-50

CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE: Journal LANGUAGE: English

CORPORATE SOURCE:

Bombesin-related peptides have widespread activities in the central nervous system and peripheral tissues. Recent studies show 2 subtypes of receptors; a gastrin-releasing peptide (GRP) receptor subtype and a neuromedin B (NMB) receptor subtype exist. In contrast to the GRP receptor, no antagonists exist for the NMB receptor. In the present study the authors report that certain somatostatin (SS) octapeptide analogs function as selective NMB receptor antagonists. The most potent analog, D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-NH2, inhibited binding of 125I-[D-Tyro] NMB to NMB receptor-transfected 3T3 cells and C6 cells. This analog had 100-fold lower affinity for GRP receptors. Structure-function studies were performed by synthesizing 18 structurally related SS octapeptide analogs; each of these analogs, but not native SS-14 or SS-28, also inhibited binding to NMB receptors. The stereochem. at positions 1, 2, 7, and 8, the hydrophobicity and ring size of the substitution in positions 1, 3, and 4, and the basicity of the group in position 5 were all important in detg. NMB receptor affinity. No SS octapeptide analog increased [3H]inositol phosphates in NMB receptor-transfected cells; however, each analog inhibited NMB-stimulated increases. The most potent analog, D-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Nal-NH2, caused a parallel rightward shift of the NMB dose-response curve, the Schild plot slope was not different from unity, and the affinity was 230 nM. SS octapeptide analogs also interacted with SS receptors and .mu.-opioid receptors; however, there was no correlation between the affinities of the analogs for these receptors and their affinities for NMB receptors, demonstrating that these activities can be sepd. The results demonstrate for the first time a class of antagonists with >100-fold selectivity for NMB vs. GRP receptors. Because the structural requirements for detg. NMB, SS, and .mu.-opioid receptor activity differ, it is likely that highly selective, specific, high affinity NMB receptor antagonists can now be developed that will be useful in defining the role of NMB in various physiol. processes.

IT 38916-34-6, Somatostatin (sheep) 73032-94-7,

Cyclic somatostatin-28 111857-96-6 144776-53-4

150155-55-8 152045-39-1 152045-40-4 152045-41-5 152045-42-6 152045-43-7 152045-45-9 152045-47-1 152045-48-2

RL: BIOL (Biological study)

(neuromedin B receptor-inhibiting activity of, structure in relation to)

L87 ANSWER 32 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:617427 HCAPLUS

DOCUMENT NUMBER: 119:217427

TITLE: Treatment of acute migraine or cluster headache

attacks with **somatostatin** analogs or

derivatives

INVENTOR(S): Hirt, Dorothea; Lataste, Xavier

Audet 734583-claim 13

PATENT ASSIGNEE(S): Sandoz-Erfindungen Verwaltungsgesellschaft m.b.H.,

Austria; Sandoz-Patent-G.m.b.H.; Sandoz Ltd.

SOURCE: PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

E: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9317037	A1	19930902	WO 1993-EP366	19930216 <

W: CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: GB 1992-3769 19920221

OTHER SOURCE(S): MARPAT 119:217427

AB Acute migraine or cluster headache attacks are treated by nasal administration of **somatostatin** analogs or derivs. Patients treated nasally with octreotide at 0.5-2 mg had an onset of action within 10-20 min. Nasal formulations are given.

TT 51110-01-1D, Somatostatin, analogs and derivs.

144776-53-4 151009-92-6

RL: BIOL (Biological study)

(cluster headache or migraine nasal treatment with)

L87 ANSWER 33 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:617391 HCAPLUS

DOCUMENT NUMBER: 119:217391

TITLE: Hepatoma treatment with **somatostatin** analogs

INVENTOR(S): Bogden, Arthur E. PATENT ASSIGNEE(S): Biomeasure, Inc., USA PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

TITLID DAME

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

ENT NO.	KIND	DATE		APPLICATION NO.	DATE			
	A1	19930902		WO 1993-US1679	19930225	<		
RW: AT, BE,	CH, DE	, DK, ES,	FR,	GB, GR, IE, IT, L	U, MC, NL,	PT,	SE	
5411943	A							
2107773	AA	19930826		CA 1993-2107773	19930225	<		
585444	A1	19940309		EP 1993-907029	19930225	<		
585444	В1	20010725						
R: AT, BE,	CH, DE	, DK, ES,	FR,				PT, S	Ε .
06507423	Т2	19940825		JP 1993-515069	19930225	<		
203410	E	20010815		AT 1993-907029	19930225			
2160595	Т3	20011116		ES 1993-907029	19930225			
1015123	A1	20020705		нк 1998-117598	19981228			
APPLN. INFO	.:			US 1992-840881 A	19920225			
			1	WO 1993-US1679 W	19930225			
	9316718 W: CA, JP RW: AT, BE, 5411943 2107773 585444 585444 R: AT, BE, 06507423 203410 2160595 1015123	9316718 A1 W: CA, JP RW: AT, BE, CH, DE 5411943 A 2107773 AA 585444 A1 585444 B1 R: AT, BE, CH, DE 06507423 T2 203410 E 2160595 T3	9316718 A1 19930902 W: CA, JP RW: AT, BE, CH, DE, DK, ES, 5411943 A 19950502 2107773 AA 19930826 585444 A1 19940309 585444 B1 20010725 R: AT, BE, CH, DE, DK, ES, 06507423 T2 19940825 203410 E 20010815 2160595 T3 20011116 1015123 A1 20020705	9316718 A1 19930902 W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, 5411943 A 19950502 2107773 AA 19930826 585444 A1 19940309 585444 B1 20010725 R: AT, BE, CH, DE, DK, ES, FR, 06507423 T2 19940825 203410 E 20010815 2160595 T3 20011116 1015123 A1 20020705 APPLN. INFO.:	9316718 A1 19930902 W0 1993-US1679 W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, L 5411943 A 19950502 US 1992-840881 2107773 AA 19930826 CA 1993-2107773 585444 A1 19940309 EP 1993-907029 ER: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, L 06507423 T2 19940825 JP 1993-515069 203410 E 20010815 AT 1993-907029 2160595 T3 20011116 ES 1993-907029 1015123 A1 20020705 HK 1998-117598 APPLN. INFO.: US 1992-840881 A	9316718 A1 19930902 W0 1993-US1679 19930225 W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, 5411943 A 19950502 US 1992-840881 19920225 2107773 AA 19930826 CA 1993-2107773 19930225 585444 A1 19940309 EP 1993-907029 19930225 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, 06507423 T2 19940825 JP 1993-515069 19930225 203410 E 20010815 AT 1993-907029 19930225 2160595 T3 20011116 ES 1993-907029 19930225 1015123 A1 20020705 HK 1998-117598 19981228 APPLN. INFO.: US 1992-840881 A 19920225	9316718 A1 19930902 W0 1993-US1679 19930225 < W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, 5411943 A 19950502 US 1992-840881 19920225 < 2107773 AA 19930826 CA 1993-2107773 19930225 < 585444 A1 19940309 EP 1993-907029 19930225 < 585444 B1 20010725 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, 06507423 T2 19940825 JP 1993-515069 19930225 < 203410 E 20010815 AT 1993-907029 19930225 2160595 T3 20011116 ES 1993-907029 19930225 2160595 T3 20011116 ES 1993-907029 19930225 1015123 A1 20020705 HK 1998-117598 19981228 APPLN. INFO.: US 1992-840881 A 19920225	9316718 A1 19930902 W0 1993-US1679 19930225 < W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 5411943 A 19950502 US 1992-840881 19920225 < 2107773 AA 19930826 CA 1993-2107773 19930225 < 585444 A1 19940309 EP 1993-907029 19930225 < 585444 B1 20010725 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, S 06507423 T2 19940825 JP 1993-515069 19930225 < 203410 E 20010815 AT 1993-907029 19930225 2160595 T3 20011116 ES 1993-907029 19930225 1015123 A1 20020705 HK 1998-117598 19981228 APPLN. INFO.: US 1992-840881 A 19920225

DEDITOR METON NO

OTHER SOURCE(S): MARPAT 119:217391

Hepatomas in mammals are treated by administering octapeptide somatostatin analogs A1-Cys-A2-D-Trp-Lys-A3-Cys-A4-Y [A1 = D-.beta.-Nal; D-Phe; A2 = Phe, pentafluoro-Phe, p-substituted X-Phe (X = halo, NH2, NO2, OH, C1-3 alkyl); A3 = Thr, Ser, Phe, Val, .alpha.-aminobutyric acid, Ile; A4 = Thr, .beta.-Nal, Trp; Y = NH2, OH] or acceptable salts or complexes. D-.beta.-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Thr-NH2, prepd. by solid phase synthesis on benzhydrylamine-polystyrene resin, inhibited the growth of M5123 hepatomas in mice.

IT 145758-77-6 150957-55-4

RL: BIOL (Biological study)

(hepatoma inhibitor)

IT 51110-01-1D, Somatostatin, analogs

RL: BIOL (Biological study)
 (hepatoma inhibitors)

L87 ANSWER 34 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:73774 HCAPLUS

DOCUMENT NUMBER: 118:73774

TITLE: Analogs of somatostatin bind selectively to

brain somatostatin receptor subtypes

AUTHOR(S): Raynor, Karen; Coy, David C.; Reisine, Terry

CORPORATE SOURCE: Sch. Med., Univ. Pennsylvania, Philadelphia, PA,

19104, USA

SOURCE: Journal of Neurochemistry (1992), 59(4),

1241-50

CODEN: JONRA9; ISSN: 0022-3042

DOCUMENT TYPE: Journal LANGUAGE: English

AΒ The present study examd. the selectivities of a series of structurally diverse somatostatin (SRIF) analogs for SRIF receptor subtypes. SRIF receptors were labeled by 125I-Tyrl1-SRIF, which has indistinguishable affinities for SRIF receptor subtypes. The inhibition by MK-678 was incomplete, indicating this peptide is highly selective for a subtype of SRIF receptor termed the SRIF1 receptor. The binding of 125I-MK-678 to SRIF1 receptors was monophasically inhibited by SRIF, the octapeptides (such as SMS-201-995), and the hexapeptides (such as MK-678), consistent with the highly selective labeling of a subtype of SRIF receptor. In contrast, the smaller CGP-23996-like analogs did not inhibit 125IMK-678 binding to SRIF1 receptors. The binding of 125I-CGP-23996 to SRIF receptors was inhibited by SRIF and the octapeptides with Hill coeffs. of <1, indicating that 125I-CGP-23996 labels multiple SRIF receptor subtypes. The hexapeptides and CGP-23996-like compds. produced only partial inhibitions of 125I-CGP-23996 binding, which were additive, indicating selective interactions of these compds. with the different receptor subpopulations labeled by 125I-CGP-23996. 125I-Tyr11-SRIF binding and 125I-CGP-23996 binding to SRIF receptors were like-wise only partially affected by 100 .mu.M GTP.gamma.S, a concn. that completely abolishes specific 125I-MK-678 binding to SRIF1 receptors. The component of 125I-CGP-23996 labeling that was sensitive to GTP.gamma.S was also MK-678 sensitive. Thus, 2 subpopulations of SRIF receptors exist in the CNS. The SRIF1 receptor is sensitive to cyclic hexapeptides such as MK-678 and to GTP.gamma.S but insensitive to smaller CGP-23996-like compds. The SRIF2 receptor is sensitive to the CGP-23996-like compds. and

receptor, the SRIF2 receptor is insensitive to these agents. IT 51110-01-1, Somatostatin 51110-01-1D,

Somatostatin, analogs 75037-27-3, Somatostatin

28 **145758-77-6**

RL: BIOL (Biological study)

(somatostatin receptor subtypes of brain binding of ligands inhibition by)

can be selectively labeled by 125I-CGP-23996 in the presence of high concns. of the hexapeptides or GTP.gamma.S because, unlike the SRIF1

L87 ANSWER 35 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:806 HCAPLUS

DOCUMENT NUMBER: 118:806

TITLE: Method of treating benign and malignant proliferative

skin disease by topical administration of a

somatostatin analog

INVENTOR(S): Bogden, Arthur E.; Moreau, Jacques Pierre

PATENT ASSIGNEE(S): Biomeasure, Inc., USA

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SOURCE:
                           PCT Int. Appl., 25 pp.
                           CODEN: PIXXD2
  DOCUMENT TYPE:
                           Patent
  LANGUAGE:
                           English
  FAMILY ACC. NUM. COUNT:
  PATENT INFORMATION:
       PATENT NO. KIND DATE
                                          APPLICATION NO. DATE
       WO 9213554 A1 19920820
                                            -----
                                          WO 1992-US1027 19920207 <--
          W: CA, CS, FI, HU, JP, NO, RU
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE
       EP 542934
                       A1 19930526
                                           EP 1992-906420 19920207 <--
       EP 542934
                            19990616
                       В1
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE
      JP 05506254 T2 19930916
                                       JP 1992-505872 19920207 <--
       AT 181240
                             19990715
                                           AT 1992-906420
                                                           19920207 <--
       ES 2134798
                             19991016
                       Т3
                                           ES 1992-906420 19920207 <--
      US 6087337
                       A
                             20000711
                                           US 1993-89410 19930709 <--
  PRIORITY APPLN. INFO.:
                                        US 1991-652863 A 19910208
                                        WO 1992-US1027 W 19920207
 OTHER SOURCE(S):
                         MARPAT 118:806
      A compn. for treating a mammal suffering from benign or malignant
      proliferative skin disease comprises an effective amt. of a
      somatostatin analog contg. .gtoreq.6 amino acids, formulated with
      an excipient suitable for topical administration to the mammal.
      D-.beta.-Naphthyl-Ala-Cys-Tyr-D-Trp-Lys-Val-Cys-Thr-NH2 was synthesized on
      benzhydrylamine-polystyrene resin. B16-F10 melanoma xenografts in mice
      were treated with topical somatuline.
      51110-01-1D, Somatostatin, analogs 144776-53-4
 IT
      RL: BIOL (Biological study)
         (benign or malignant proliferative skin disease topical treatment with)
     ANSWER 36 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER: 1992:152405 HCAPLUS
 DOCUMENT NUMBER:
                         116:152405
 TITLE:
                        Preparation of somatostatin analogs
 INVENTOR(S):
                      Schally, Andrew V.; Janaky, Tamas; Cai, Ren Zhi
Tulane Educational Fund, Inc., USA
 PATENT ASSIGNEE(S):
 SOURCE:
                        Eur. Pat. Appl., 28 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                       English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO. KIND DATE
                                 APPLICATION NO. DATE
     -----
                                          -----
     EP 450480 A2 19911009
                                          EP 1991-104845 19910327 <--
               A3 19950621
B1 19950621
     EP 450480
     EP 450480
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
     ES 2075244
                T3 19951001 ES 1991-104845 19910327 <--
AA 19911007 CA 1991-2039880 19910405 <--
     CA 2039880
                   AA 19911007
A1 19911010
B2 19930617
    AU 9174105
                                         AU 1991-74105
                                                          19910405 <--
    AU 638118
                           19930617
    HU 59165 A2 19920428
JP 06041194 A2 19940215
                                        HU 1991-1117
                                                          19910405 <--
                                         JP 1991-72935
                                                          19910405 <--
PRIORITY APPLN. INFO.:
                                       US 1990-505501
OTHER SOURCE(S):
                                                          19900406
                      MARPAT 116:152405
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GI

Audet 734583-claim 13

residue; R1 = L- or D-Phe, D-Trp, L- or D-Mel; R3 = Mel, Tyr, Phe; R6 = Thr, Val; R8 = Thr, Trp, Mel] and II [R1 = L- or D-Phe, L- or D-Try; R3 = Phe, Trp; R6 same as defined above; R8 = Thr, Trp; A =-HNCH2(CH2)mCH(NH)(CH2)nCO-; m, n = 0, 1; Q1 = cytotoxic moiety] and their pharmaceutical acceptable salts were prepd. Successive coupling of BOC-Thr(Bzl)-OH, BOC-Cys(MBzl)-OH, BOC-Val-OH, BOC-Lys[Z(2-Cl)]-OH, BOC-D-Trp-OH, BOC-Tyr[$\overline{z}(2-Br)$]-OH, BOC-Cys(MBzl)-OH, and BOC-Mel-OH [Bzl = benzyl, MBzl = methylbenzyl] to a benzhydrylamine resin, cleavage of the resulting peptide from the resin, oxidn., and deprotection gave I [Q = H,R1 = Mel, R3 = R8 = Tyr, R6 = Val} (III). In an in vitro study using dispersed rat pituitary cell superfusion system the affinity consts. of III to rat cortex and prostte tumor cell membranes were 13.355 and 1.378 .times. 109M-1, resp., compared with 15.795 and 1.378 .times. 109M-1 for somatostatin (1-14).

51110-01-1DP, Somatostatin, analogs ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

139692-67-4P IΤ

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as somatostatin analog)

L87 ANSWER 37 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1992:52344 HCAPLUS

DOCUMENT NUMBER:

116:52344

TITLE:

Octapeptide analogs of somatostatin having

threonine at the sixth position Coy, David H.; Murphy, William A. Tulane Educational Fund, Inc., USA

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 16 pp. CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9109056 W: CA, HU, RW: AT, BE, CA 2046594 EP 457888 EP 457888	A1 JP, KR CH, DE, AA A1 B1 CH, DE, A2	DK, ÉS, F 19910627 DK, ÉS, F 19910609 19911127 19960710	WO 1990-US7074 R, GB, GR, IT, LU, NL CA 1990-2046594 EP 1991-901181 R, GB, GR, IT, LI, LU, HU 1991-2648	19901204 < , SE 19901204 < 19901204 < NL, SE 19901204 <
	E T3 B2 A	19960715 19961116 19990728 19910925	AT 1991-901181 ES 1991-901181 JP 1990-501584 ZA 1990-9896 US 1989-447876 WO 1990-US7074	19901204 < 19901204 < 19901204 < 19901210 < 19891208 19901204

AB The title somatostatin analogs I (A1, A2 = H, C1-12 alkyl, C7-10 phenylalkyl, R1CO, R2OCO; R1 = C1-20 alkyl, C3-20 alkenyl, C3-20 alkenyl, Ph, naphthyl, C7-10 phenylalkyl; R2 = C1-10 alkyl, C7-10 phenylalkyl; $\bar{X}1$, X2 = H, F, Cl, Br, OH, Me, CF3; A3 = Phe, Tyr; A4 = OH, NH2, NHR3; R3 = satd. aliph. C1-8 alkyl; .beta.Nal = .beta.-naphthylalanine; with provisions) or pharmaceutically acceptable salts are used to treat a mammal in need of redn. of growth hormone, epidermal growth factor, insulin, glucagon, etc. Therapeutic compns. comprise I. Synthesis of reduced D-Phe-Cys-Phe-D-Trp-Lys-Val-Cys-.beta.Nal-NH2 is described.

TΤ 9002-62-4, Prolactin, biological studies 9002-72-6,

Growth hormone

RL: BIOL (Biological study)

(release of, inhibition of, with somatostatin octapeptide analogs)

ΙT 138248-86-9 138248-87-0

RL: BIOL (Biological study)

(somatostatin octapeptide analog)

ΙT 138248-90-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of)

IΤ 51110-01-1D, Somatostatin, octapeptide analogs

RL: PROC (Process)

(threonine in sixth position of)

ANSWER 38 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

1991:599065 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 115:199065

TITLE: Octapeptide analogs of somatostatin inhibit the clonal growth and vasoactive intestinal

peptide-stimulated cyclic AMP formation in human small

cell lung cancer cells

AUTHOR(S): Taylor, J. E.; Moreau, J. P.; Baptiste, L.; Moody, T.

CORPORATE SOURCE: Biomeasure Inc., Hopkinton, MA, 01748, USA

SOURCE: Peptides (New York, NY, United States) (1991

), 12(4), 839-43

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal LANGUAGE: English

Two endocrinol. active octapeptide analog (BIM-23014 C and BIM-23034) of somatostatin (SRIF) contg. either an N- or C-terminal 3-(2-naphthyl)-D-Ala residue were examd. for their ability to inhibit the in vitro receptor binding, clonal growth, and VIP-stimulated cAMP formation in human small cell lung cancer cell (SCLC) line NCI-H345. Both SRIF peptides inhibited [1251]SRIF(Tyrl1)-14 binding with IC50 values in the low nM range. Colony formation in the in vitro SCLC growth assay was also inhibited in the same concn. range, as was VIP-stimulated cAMP

formation. Therefore, octapeptide analogs of SRIF function as SCLC SRIF receptor agonists.

IT **51110-01-1D**, **Somatostatin**, octapeptide analogs **111857-95-5**, BIM 23034

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(antitumor activity of, in human small cell lung carcinoma, receptor binding and VIP-induced cAMP formation in relation to)

L87 ANSWER 39 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:82559 HCAPLUS

DOCUMENT NUMBER: 114:82559

TITLE:

Preparation of octapeptideamides as hormone release

inhibitors or antagonists

INVENTOR(S): Eck, Charles R.; Moreau, Sylvianne

PATENT ASSIGNEE(S): Biomeasure, Inc., USA SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.	KIND	DATE		APPLICATION NO.	DATE
EP 389 EP 389		A1 B1	19900926 19950104		EP 1990-302760	19900315 <
R:	AT, BE,	CH, DE,	DK, ES,	FR, G	B, GR, IT, LI, LU	J, NL, SE
CA 201		AA	19900915		CA 1990-2012115	19900314 <
CA 201:	2115	C	20010703			
JP 022	39599	A2	19901129		JP 1990-65511	19900315 <
JP 288	3912	B2	19990510		01 1990 00011	10000110 <
ES 206	3333	Т3	19950416		ES 1990-302760	19900315 <
PRIORITY API	PLN. INFO.			IIC		
OTHER SOURCE		•	RPAT 114:8		1989-323777 A	19890315

AΒ R1R2NCHR3CO-Cys-Tyr(I)-D-Trp-Lys-X1-Cys-XNH2 [R1 ,R2 = H, alkyl, phenylalkyl, acyl, (phenyl)alkoxycarbonyl; R3 = CH2R4, R4 = pentafluorophenyl, naphthyl, pyridyl, (substituted) Ph; Tyr(I) = Tyr ring-iodinated at the 3- or 5-position; X1 = Thr, Ser, Phe, Val, Ile, .alpha.-aminobutyryl; X2 = Thr, Trp, .beta.-Nal], were prepd. as drugs (no data). Thus, D-.beta.-naphthylalanyl-Cys-Tyr(I)-D-Trp-Lys-Val-Cys-Thr-NH2 was prepd. using Me3CO2C-protected amino acids on benzhydrylamine resin followed by iodination with chloramine T/NaI in pH 7.4 phosphate buffer.

ΙT 9002-72-6, Growth hormone

RL: RCT (Reactant); RACT (Reactant or reagent) (antagonists, octapeptideamides)

ΙT 51110-01-1P, Somatostatin

RL: SPN (Synthetic preparation); PREP (Preparation) (octapeptide analogs, prepn. of, as hormone release inhibitors or antagonists)

TT 131799-90-1P 131799-91-2P

> RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as hormone release inhibitor or antagonist)

ANSWER 40 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN L87

1990:235851 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 112:235851

TITLE: Somatostatin peptide hormone analogs for inhibition of blood vessel blockage

INVENTOR(S): Ramwell, Peter W.; Braquet, Pierre

PATENT ASSIGNEE(S): Societe d'Etudes de Produits Chimiques S. A., Fr.

SOURCE: PCT Int. Appl., 31 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8912068 W: JP, US RW: BE, DE	A2	19891214	WO 1989-US2352	19890602 <
US 5147856 EP 383856	A Al	19920915 19900829	US 1989-329854 EP 1989-906914	19890328 < 19890602 <
R: BE, DE JP 03500660 JP 07025691	T2 B4	19910214 19950322	JP 1989-506590	19890602 <
PRIORITY APPLN. INFO.	:	Ţ	§B 1988-13160 US 1989-329854 ÑO 1989-US2352	19880603 19890328 19890602

OTHER SOURCE(S):

MARPAT 112:235851

GI

A¹A²NCHA³COCys-A⁴-D-Trp-Lys-A⁵-Cys-D₁L-A⁷-Z

1

AB A method for inhibiting blood vessel blockage in a mammal comprises administering to a mammal before, during, and/or after a surgical procedure, e.g., angioplasty, arterial bypass, or an allograft transplant operation, an effective blood vessel blockage-inhibiting amt. of an octapeptide [I; A1, A2 = H, C1-12 alkyl, C7-12 phenylakyl, (phenyl)alkanoyl, alkenoyl, PhCO, naphthylcarbonyl, (phenyl)alkoxylcarbonyl; A3 = CH2A6; A4 = o-, m-, or p-XC6H4, C6F5, .beta.-Nal, Tyr; A5 = D- or L-Thr, Ser, Phe, Val, Ile, .alpha.-aminobutyric acid; A6 = (pentafluoro)phenyl, naphthyl, pyridyl; A7 = Thr, Trp, .beta.-Nal; .beta.-Nal = 3-(2-naphthyl)-D- or -L-Ala; X =halo, NH2, NO2, OH, alkyl; Z = NH2, OH]. In inhibition of allograft rejection, I is delivered preferably in conjunction with cyclosporin. Thus, angiopeptin, i.e. I (A1A2NCHA3CO = D-.beta.-Nal, A4 = Tyr, A5 = Val, D,L-A7-Z = Thr-NH2) and 2 other I were prepd. by the solid phase method on a benzhydrylamine resin. I at 20 or 50 .mu.g/kg/day in rats significantly inhibited myointimal proliferation of the carotid artery following endothelial injury by air drying.

IT 111857-95-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as blood vessel blockage inhibitor)

IT 51110-01-1DP, Somatostatin, analogs

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as blood vessel blockage inhibitors)

L87 ANSWER 41 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1990:92051 HCAPLUS

DOCUMENT NUMBER:

112:92051

TITLE:

Inhibition of myointimal proliferation of the rat carotid artery by the peptides, angiopeptin and BIM

23034

AUTHOR(S):

Lundergan, Connor; Foegh, Marie L.; Vargas, Roberto; Eufemio, Michael; Bormes, Gregory W.; Kot, Peter A.;

Ramwell, Peter W.

CORPORATE SOURCE:

Med. Cent., Georgetown Univ., Washington, DC, 20007,

USA

Atherosclerosis (Shannon, Ireland) (1989), SOURCE:

80(1), 49-55 CODEN: ATHSBL; ISSN: 0021-9150

DOCUMENT TYPE: Journal English LANGUAGE:

Myointimal proliferation of the rat carotid artery was inhibited by a synthetic peptide, angiopeptin, and its closely related congener, BIM 23034. Proliferation was initiated in the carotid artery of anesthetized rats by air-drying of the endothelium. After 15 days the rats were killed and the carotid artery was pressure-fixed and subjected to morphol. anal. for evaluation of the degree of myointimal thickening. Five synthetic somatostatin-like peptides were tested by pretreating rats (20 and 50 .mu.q/kq/rat, s.c. daily) for 2 days prior to and for 5 days after the endothelial injury. Angiopeptin and the closely related octapeptide (BIM 23034) inhibited myointimal thickening. Angiopeptin was also effective when the pretreatment period was reduced from 2 days to 30 min. The inhibitory effect of angiopeptin was further confirmed in an addnl. expt. involving [3H]thymidine incorporation. In this expt. angiopeptin (100 .mu.g/kg/day, s.c.) was also administered for 2 days prior to and 5 days following the endothelial injury and it inhibited thymidine uptake. All the peptides tested inhibit the release of growth hormone. However, only angiopeptin and BIM 23034 inhibited myointimal proliferation. Thus, the effect of angiopeptin and its congener is unlikely to be mediated through growth hormone. Since angiopeptin inhibits myointimal proliferation it may have clin. utility in preventing restenosis following angioplasty and coronary artery bypass procedures.

IT **111857-95-5**, BIM 23034

RL: BIOL (Biological study)

(carotid artery myointimal proliferation inhibition by)

51110-01-1D, Somatostatin, analogs IT

RL: BIOL (Biological study)

(carotid artery myointimal proliferation response to)

ΙT 9002-72-6, Growth hormone RL: BIOL (Biological study)

(carotid artery myointimal proliferation response to somatostatin analogs in relation to)

ANSWER 42 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

1989:450777 HCAPLUS ACCESSION NUMBER:

Correction of: 1987:96459

DOCUMENT NUMBER:

111:50777

Correction of: 106:96459

Synthesis and evaluation of activities of octapeptide TITLE:

analogs of somatostatin

Cai, Ren Zhi; Szoke, Balazs; Fu, Dadin; Redding, AUTHOR(S):

Tommie W.; Colaluca, John; Torres-Aleman, I.; Schally,

Andrew V.

CORPORATE SOURCE:

Med. Cent., Tulane Univ., New Orleans, LA, 70146, USA Pept.: Struct. Funct., Proc. Am. Pept. Symp., 9th (

1985), 627-30

CODEN: 54ZNAJ

DOCUMENT TYPE:

Conference

LANGUAGE:

SOURCE:

English

For diagram(s), see printed CA Issue. GI

The growth hormone (GH) secretion inhibiting activity of somatostatin-14 and 17 octapeptide analogs was presented and related to structure. The most active compd. RC121 (I), was 200-fold more inhibitory than somatostatin-14 on GH secretion. The ctivities of the analogs indicate the importance of the C- and N-terminal residues, esp. the C-terminal residue hydroxyl group. Other biol. activities of the analogs were also briefly discussed.

51110-01-1, Somatostatin 103222-00-0 TΤ

Audet 734583-claim 13

RL: BIOL (Biological study)

(growth hormone release inhibition by, structure in relation to)

IT 51110-01-1D, Somatostatin, octapeptide analogs

RL: BIOL (Biological study)

(growth hormone secretion inhibition by, structure in relation to)

IT 9002-72-6, Somatotropin

RL: BIOL (Biological study)

(release of, somatostatin octapeptide analogs effect on,

structure in relation to)

L87 ANSWER 43 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:450516 HCAPLUS

DOCUMENT NUMBER: 111:50516

TITLE: Receptor-selective somatostatin (SRIF)

analogs

AUTHOR(S): Coy, D. H.; Heiman, M. L.; Rossowski, J.; Murphy, W.

A.; Taylor, J. E.; Moreau, S.; Moreau, J. P.

CORPORATE SOURCE: Sch. Med., Tulane Univ., New Orleans, LA, 70112, USA SOURCE: Pept.: Chem. Biol., Proc. Am. Pept. Symp. 10th (

1988), Meeting Date 1987, 462-4. Editor(s):

Marshall, Garland R. ESCOM Sci. Pub.: Leiden, Neth.

CODEN: 56MDA6

DOCUMENT TYPE: Conference LANGUAGE: English

Octapeptide somatostatin (SRIF) analogs were examd. for binding to receptors in rat pancreas, anterior pituitary, cerebral cortex, and adrenal cortex. For SRIF ring sizes >8, receptor assays previously showed no difference between binding to brain and pituitary receptors. However, amidated octapeptide analogs had less affinity for cerebral cortex than for pituitary receptors. A sudden and dramatic loss of binding affinity for brain receptors was obsd. in a D-Nal-contg. analog (position 1), where Nal stands for .beta.-naphthylalanine. This peptide maintained its affinity for pancreas, pituitary, and adrenal receptors but was devoid of affinity for gastric mucosa receptors. Another octapeptide with L-Nal at its C-terminus also dissocd. pituitary and brain binding but had high affinity for pancreatic and adrenal receptors relative to pituitary receptors suggesting the existence of another subset of SRIF receptors. Equal affinity of a hexapeptide analog for both brain and pituitary receptors and for pancreatic and adrenal tissue indicated another major class of SRIF analogs. The new octapeptide analogs are useful tools for delineating the various classes of SRIF receptors as well as being of therapeutic value.

IT 38916-34-6D, Somatostatin (sheep), octapeptide analogs
121715-54-6

RL: PROC (Process)

(receptor binding of, in adrenal cortex and anterior pituitary and brain and pancreas, mol. structure in relation to)

L87 ANSWER 44 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:232105 HCAPLUS

DOCUMENT NUMBER: 110:232105

TITLE: Preparation of therapeutic somatostatin

analogues

INVENTOR(S): Coy, David H.; Murphy, William A.; Heiman, Mark L.

PATENT ASSIGNEE(S): Tulane Educational Fund, Inc., USA

SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 11

PATENT INFORMATION:

PATENT NO. KIND DATE

APPLICATION NO. DATE

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      EP 298732
      A2 19890111

      EP 298732
      A3 19900606

      EP 298732
      B1 19930901

                                     19890111
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           R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
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      US 4853371 A 19890801
JP 01070500 A2 19890315
JP 2809403 B2 19981008
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19941101 ES 1988-306188 19880707 <--
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                            A1 19960430
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      ES 2058290 T3 19941101 US 4904642 A 19900227
      EP 414475 A1 19910227
EP 414475 B1 19971210
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           W: AU, CA, JP
      AU 9063449 A1
AU 655156 B2
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WO 9115771 A1 19911017 WO 1991-US2225 19910329 <--
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     GB 2257784 A1 19930120
BR 9106309 A 19930420
HU 62706 A2 19930528
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JP 2733138 B2 19980220
PL 172133 B1
EP 450931
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ES 2088465 T3
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19960816 ES 1991-302910 19910403 <--
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PRIORITY APPLN. INFO.:
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                                                                              19880707
                                                    US 1990-504352 19900404 1990-US4766 19910329 EP 1991-302910 19910403 US 1992-910760 19920707
OTHER SOURCE(S): MARPAT 110:232105
GΙ
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Page 39

AB Peptides contg. the sequence (I; X = amino acid residue), useful for inhibition of secretion of growth hormone, insulin, and glucagon, for treatment of cancer, acromegaly, ulcer, pancreatitis, diarrhea, diabetes, cirrhosis, Alzheimer's disease, mushroom poisoning, and as analgesics (no data), were prepd. Peptide II [.beta.-Nal = 3-(2-naphthalenyl)alanyl] was prepd. by the solid phase method on benzhydrylamine resin.

IT 9002-72-6, Growth hormone

RL: RCT (Reactant); RACT (Reactant or reagent)
 (inhibition of secretion of, using octapeptides)

IT 120796-15-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and cyclization of, in prepn. of growth hormone secretion inhibitor)

IT 111857-95-5P 111857-96-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as growth hormone secretion inhibitor)

IT 120796-13-6DP, benzhydrylamine resin bound

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as intermediate for growth hormone secretion inhibitor)

L87 ANSWER 45 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 19

1988:132324 HCAPLUS

DOCUMENT NUMBER:

108:132324

TITLE:

Preparation of **somatostatin** analogs as drugs

INVENTOR(S):

Coy, David H.; Murphy, William A.; Heiman, Mark L. Tulane Educational Fund, Inc., USA

PATENT ASSIGNEE(S): SOURCE:

Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

11

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT NO.		KIND	DATE		API	PLICATION NO.	DATE	
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ΑU	602657 .		B2	19901025			•		
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GI
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A1A2NCHA3CO-Cys-A4-D-Trp-Lys-A5-Cys-A7-NH2 I

The title compds. [I; A1, A2 = H, alkyl, phenylalkyl, acyl, alkoxycarbonyl; A3 = CHA6 (A6 = pentafluorophenyl, naphthyl, pyridyl, phenyl); A4 = o-, m-, or p-substituted X-Phe (X = H, halo, NO2, OH, NH2, alkyl), pentafluoro-Phe, .beta.-naphthylalanyl (.beta.-Nal); A5 = Thr, Ser, Phe, Val, .alpha.-aminoisobutyric acid residue, Ile; A7 = Thr, Trp, .beta.-Nal], somatostatin analogs, and their pharmaceutically acceptable salts are prepd. via the solid-phase method.
H-D-.beta.-Nal-Cys-Tyr-D-Trp-Lys-Val-Cys-Thr-NH2 was prepd. by peptide coupling of the appropriate protected amino acids on a benzhydrylamine

resin, followed by deprotection and resin cleavage using HF/anisole.

IT 113294-87-4P 113294-88-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, for redn. of growth hormone, insulin, glucagon, or

pancreatic exocrine secretion)

ΙT 51110-01-1DP, Somatostatin, analogs

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent) (solid-phase synthesis of, for redn. of growth hormone, insulin, glucagon, or pancreatic exocrine secretion)

L87 ANSWER 46 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1988:714 HCAPLUS

DOCUMENT NUMBER: 108:714

TITLE: .mu.-Opiate binding and morphine antagonism by

octapeptide analogs of somatostatin

AUTHOR(S): Walker, J. Michael; Bowen, Wayne D.; Atkins, Steven

T.; Hemstreet, Mitzi K.; Coy, David H.

CORPORATE SOURCE: Dep. Psychol., Brown Univ., Providence, RI, 02912, USA

SOURCE: Peptides (New York, NY, United States) (1987), 8(5), 869-75

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal LANGUAGE: English

A series of cyclic conformationally restrained octapeptide analogs of somatostatin were examd. for their ability to inhibit the binding of tritiated .mu., .kappa., and .delta. opiate receptor ligands. Several of these substances were found to have high affinity for .mu. opiate receptors while having very low affinity for both .kappa. and .delta. receptors. Previous suggestions that somatostatin analogs exhibit opiate antagonist activity led to a study of the ability of the 2 most potent compds. to inhibit morphine analgesia in rats after intracerebroventricular injection. One of the compds. significantly antagonized morphine analgesia, although the other displayed severe toxicity. These 2 compds. differed in that the very toxic compd. had previously been found to possess significant somatostatin activity. Thus, the structural requirements for toxicity and somatostatin activity can be differentiated from those of opiate activity.

IT 51110-01-1D, Somatostatin, analogs 111857-95-5 , DC-13-212 **111857-96-6**, DC-13-217 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(opiate activity of, structure in relation to)

ANSWER 47 OF 47 HCAPLUS COPYRIGHT 2003 ACS on STN

1986:472825 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 105:72825

TITLE: Synthesis and biological activity of highly potent

octapeptide analogs of somatostatin

AUTHOR(S): Cai, R. Z.; Szoke, B.; Lu, R.; Fu, D.; Redding, T. W.;

Schally, A. V.

Sch. Med., Tulane Univ., New Orleans, LA, 70146, USA CORPORATE SOURCE: SOURCE:

Proceedings of the National Academy of Sciences of the

United States of America (1986), 83(6),

1896-900

CODEN: PNASA6; ISSN: 0027-8424

DOCUMENT TYPE: Journal LANGUAGE: English

In the search for selective and long-acting analogs of somatostatin, nearly 200 compds. were synthesized by solid-phase methods, purified, and tested biol. Among these octapeptides, some contained N-terminal D-Phe, Ac-D-Phe, or AcPhe followed by hexapeptide sequences Cys-Phe-D-Trp-Lys-Thr-Cys or Cys-Tyr-D-Trp-Lys-Val-Cys and

Thr-NH2 or Trp-NH2 as C-terminal residues. (Cyclo 2-7)-D-Phe-Cys-Try-D-Trop-Lys-Val-Cys-Thr-NH2 (I) [99660-13-6] and (cyclo 2-7)-D-Phe-Cys-Tyr-D-Trp-Lys-Val-Cys-Trp-NH2 (II) [103222-11-3] were 177 times and 113 times more potent, resp., than somatostatin in tests for inhibition of growth hormone [9002-72-6] release. These 2 octapeptides contg. tyrosine and valine in positions 3 and 6, resp., were more active and more selective than their Ph-3 and Thr-6 counterparts, (cyclo 2-7)-D-Phe-Cys-Phe-D-Trp-Lys-thr-Cys-Thr-NH2 [99685-66-2] and (cyclo 2-7)-D-Phe-Cys-Phe-D-Trp-Lys-Thr-Cys-Trp-NH2 [103222-10-2]. I was also .apprx.6 times more potent than its L-Trp-4 diastereoisomer [103222-07-7]. The analogs I, and II showed a prolonged duration of action and inhibited growth hormone release for at least 3 h. Analogs of both Phe-3/Thr-6 and $\bar{\text{Tyr}}$ -3/Val-6 classes also suppressed the release of insulin [9004-10-8] and glucagon [9007-92-5] in rats and pentagastrin-induced secretion of gastric acid in dogs, but their potencies in these tests were much smaller than the growth-hormone-release inhibitory activity. Some of these analogs possessed antitumor activities as shown by the inhibition of growth of animal models of prostate, mammary, and ductal pancreatic tumors.

IT **51110-01-1D**, analogs

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (biol. activity, mol. structure in relation to)

IT 51110-01-1 103222-00-0 103548-91-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (growth hormone secretion inhibition by, mol. structure in relation to)

IT 9002-72-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (somatostatin analog inhibition of release of, mol. structure in relation to)

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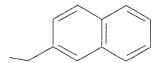
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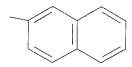
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- L89 ANSWER 1 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN
- RN **243470-90-8** REGISTRY
- CN L-Alaninamide, 3-(2-naphthalenyl)-L-alanyl-D-cysteinyl-3-(2-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-L-isoleucyl-L-cysteinyl-3-(2-naphthalenyl)-(9CI) (CA INDEX NAME)
- FS PROTEIN SEQUENCE; STEREOSEARCH
- MF C63 H76 N12 O8 S2
- SR CA
- LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

PAGE 1-B





1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:208607

L89 ANSWER 10 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 243470-81-7 REGISTRY

CN L-Alaninamide, 3-(2-naphthalenyl)-L-alanyl-D-cysteinyl-3-benzo[b]thien-2-yl-L-alanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C65 H75 N11 O8 S3

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:208607

L89 ANSWER 20 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **230646-30-7** REGISTRY

CN L-Alaninamide, 4-chloro-L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic

(2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PRL 2970

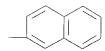
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MF C58 H68 Cl N11 O10 S2

SR CA

LC STN Files: CA, CAPLUS

PAGE 1-B



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2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:211269

REFERENCE 2: 131:124917

L89 ANSWER 30 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **209006-90-6** REGISTRY

CN L-Alaninamide, 4-nitro-L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-(2S)-2-aminobutanoyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

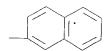
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MF C58 H68 N12 O11 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 129:68033

L89 ANSWER 40 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **209006-77-9** REGISTRY

CN L-Alaninamide, L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-(2S)-2-aminobutanoyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C58 H69 N11 O9 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 129:68033

L89 ANSWER 50 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209006-50-8 REGISTRY

L-Alaninamide, N-[[2-[4-(2-hydroxyethyl)-1-piperazinyl]ethyl]sulfonyl]-3-(2-naphthalenyl)-L-alanyl-D-cysteinyl-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C69 H86 N14 O12 S3

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 129:68033

CN

ANSWER 60 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN L89 RN

209006-36-0 REGISTRY

 $L-Alanina mide, \ N-acetyl-L-phenylalanyl-D-cysteinyl-3-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl)-L-phenylalanyl-1-(3-pyridinyl-1-(3-pyridinyl-1-(3-pyridinyl-1-(3-pyridinyl-1-(3-pyridinyl-1-(3-pyridinyl-1-(3-pyridinyl-1-(3-p$ alanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

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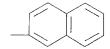
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LC STN Files: CA, CAPLUS, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 129:68033

L89 ANSWER 70 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **209006-19-9** REGISTRY

CN L-Phenylalaninamide, 4-chloro-L-phenylalanyl-D-cysteinyl-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-3-methyl-L-valyl-L-cysteinyl-4-chloro-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C55 H68 C12 N12 O8 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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Cl

2 REFERENCES IN FILE CA (1947 TO DATE) 2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:124917

REFERENCE 2: 129:68033

L89 ANSWER 80 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209006-08-6 REGISTRY

CN L-Alaninamide, 3-(2-naphthalenyl)-L-alanyl-D-cysteinyl-3-iodo-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

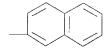
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MF C63 H72 I N11 O9 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:124917

REFERENCE 2: 129:68033

L89 ANSWER 90 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **209005-93-6** REGISTRY

CN L-Alaninamide, 3-(2-naphthalenyl)-L-alanyl-D-cysteinyl-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-L-isoleucyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

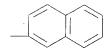
FS PROTEIN SEQUENCE; STEREOSEARCH

MF C63 H74 N12 O8 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-B



2 REFERENCES IN FILE CA (1947 TO DATE)

2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:124917

REFERENCE 2: 129:68033

L89 ANSWER 100 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **209005-82-3** REGISTRY

CN L-Phenylalaninamide, 4-fluoro-L-phenylalanyl-D-cysteinyl-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-4-fluoro-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C54 H66 F2 N12 O8 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

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F

2 REFERENCES IN FILE CA (1947 TO DATE)
2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:124917

REFERENCE 2: 129:68033

L89 ANSWER 110 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **205234-67-9** REGISTRY

CN L-Alaninamide, L-phenylalanyl-D-cysteinyl-3-(3-pyridinyl)-L-alanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN DC-38-51

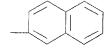
FS PROTEIN SEQUENCE; STEREOSEARCH

MF C58 H70 N12 O8 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

PAGE 1-B



2 REFERENCES IN FILE CA (1947 TO DATE)

2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 129:68033

REFERENCE 2: 128:252501

L89 ANSWER 120 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **195520-42-4** REGISTRY

CN L-Alaninamide, 4-nitro-L-phenylalanyl-D-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-N2-methyl-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C50 H66 N12 O11 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

2 REFERENCES IN FILE CA (1947 TO DATE)
2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 130:47494

REFERENCE 2: 127:248422

L89 ANSWER 130 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 182482-16-2 REGISTRY

CN L-Alaninamide, D-phenylalanyl-L-cysteinyl-O-(1,1-dimethylethyl)-L-tyrosyl-D-tryptophyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

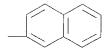
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MF C71 H93 N11 O12 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PAGE 1-B



1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 125:276578

L89 ANSWER 140 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **163687-44-3** REGISTRY

CN L-Alaninamide, D-phenylalanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-(2S)-2-aminobutanoyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN L-Alaninamide, D-phenylalanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-2-aminobutanoyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide

OTHER NAMES:

CN 46: PN: US20020042374 PAGE: 10 claimed protein

CN 50: PN: US6268342 SEQID: 55 claimed protein

CN NC 8-12

CN PRL 2486

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C58 H69 N11 O9 S2

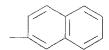
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LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

PAGE 1-A

PAGE 1-B



- 14 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 14 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 139:30439

REFERENCE 2: 137:346570

REFERENCE 3: 137:295256

REFERENCE 4: 136:304089

REFERENCE 5: 135:132468

REFERENCE 6: 134:13526

REFERENCE 7: 130:20992

REFERENCE '8: 130:20991

REFERENCE 9: 128:239911

REFERENCE 10: 127:229846

L89 ANSWER 150 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN RN 154897-02-6 REGISTRY

- CN D-Alaninamide, 3-(naphthalenyl)-L-alanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(naphthalenyl)- (9CI) (CA INDEX NAME)
- FS PROTEIN SEQUENCE
- MF C63 H75 N11 O9 S2
- CI IDS
- SR CA
- LC STN Files: CA, CAPLUS
- **RELATED SEQUENCES AVAILABLE WITH SEQLINK**

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- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 120:290830

L89 ANSWER 160 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **152045-40-4** REGISTRY

CN D-Alaninamide, 3-(2-naphthalenyl)-D-alanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv. OTHER NAMES:

CN D-Nal-cyclo-(Cys-Tyr-D-Trp-Lys-Val-Cys)-D-Nal-NH2

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C63 H73 N11 O9 S2

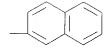
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LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEOLINK

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3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 131:295567

REFERENCE 2: 124:46620

REFERENCE 3: 120:46123

L89 ANSWER 170 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 138248-90-5 REGISTRY

CN Alaninamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.

CN DL-Alaninamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C59 H71 N11 O8 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A

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- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 116:52344

L89 ANSWER 180 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN **111857-96-6** REGISTRY

CN L-Alaninamide, 3-(2-naphthalenyl)-D-alanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl-L-cysteinyl-3-(2-naphthalenyl)-, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv. OTHER NAMES:

CN 49: PN: US20020042374 PAGE: 10 claimed protein

CN 53: PN: US6268342 SEQID: 58 claimed protein

CN BIM 23042

CN D-Nal-cyclo(Cys-Tyr-D-Trp-Lys-Val-Cys)-Nal-NH2

CN DC-13-217

FS PROTEIN SEQUENCE; STEREOSEARCH

MF C63 H73 N11 O9 S2

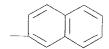
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LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

RELATED SEQUENCES AVAILABLE WITH SEQLINK

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- 19 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 19 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:295256

REFERENCE 2: 136:304089

REFERENCE 3: 136:161394

REFERENCE 4: 135:132468

REFERENCE 5: 131:295567

REFERENCE 6: 130:20992

REFERENCE 7: 130:20991

REFERENCE 8: 129:23568

REFERENCE 9: 128:239911

REFERENCE 10: 128:110989

ANSWER 183 OF 183 REGISTRY COPYRIGHT 2003 ACS on STN

RN 103222-00-0 REGISTRY

L-Alaninamide, D-phenylalanyl-L-cysteinyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-CN valyl-L-cysteinyl- (9CI) (CA INDEX NAME) PROTEIN SEQUENCE; STEREOSEARCH

FS

MF C49 H67 N11 O9 S2

SR

LC STN Files: CA, CAPLUS, TOXCENTER

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.

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NH2

2 REFERENCES IN FILE CA (1947 TO DATE)

2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 111:50777

REFERENCE 2: 105:72825 => fil hcaplus FILE 'HCAPLUS' ENTERED AT 11:31:06 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L20
            42 SEA FILE=REGISTRY ABB=ON PLU=ON FWWKTFG/SQSP
L22
            11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20
L23
          5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?
          89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?
L24
L25
            10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24
           467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP
L27
L34
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L35
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               MULTICHAI?)
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L37
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                                        PLU=ON L36 AND L24
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            ·41 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L25
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          15284 SEA FILE=REGISTRY ABB=ON PLU=ON
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         15240 SEA FILE=REGISTRY ABB=ON
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                                                L43 AND SQL>=7
L54
            72 SEA FILE=REGISTRY ABB=ON PLU=ON L44 AND SQL=7
L55
            33 SEA FILE=HCAPLUS ABB=ON PLU=ON L54
L56
            27 SEA FILE=HCAPLUS ABB=ON PLU=ON L55 AND L24
L57
            18 SEA FILE=HCAPLUS ABB=ON PLU=ON L56 NOT (L25 OR L38)
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L57 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:427795 HCAPLUS

DOCUMENT NUMBER: 129:95723

TITLE: Preparation of conformationally constrained backbone

cyclized somatostatin analogs and

combinatorial libraries

INVENTOR(S): Hornik, Vered; Seri-Levy, Alon; Gellerman, Gary;

Gilon, Chaim

PATENT ASSIGNEE(S): Peptor Ltd., Israel; Yissim Research Development Co.

of Hebrew University of Jerusalem U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 488,159. CODEN: USXXAM SOURCE:

DOCUMENT TYPE:

GΙ

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

10

PATENT INFORMATION:

PATENT N		DATE	APPLICATION NO. DATE	
US 58113	92 74	A 19980922 A 20000912		US 1996-690090 19960731 US 1995-488159 19950607 US 1995-569042 19951207 WO 1997-IL261 19970730
₩:	AL, AM, DK, EE, LC, LK, PT, RO,	AT, AU, ES, FI, LR, LS, RU, SD,	GB, GE, LT, LU, SE, SG,	BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, BY, KG, KZ, MD, RU, TJ, TM
RW:	GH, KE, GB, GR,	LS, MW, IE, IT, MR. NE.	SD, SZ, LU, MC, SN, TD,	UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, TG
AU 97363	31	A1 B2	19980220	AU 1997-36331 19970730 EP 1997-932978 19970730
R:	AT, BE,	CH, DE,	DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
CN 12316 BR 97106 JP 20005 US 62653 KR 20000 US 64070 PRIORITY APPL	J 9	D-1	20000111 20001212 20010724 20000525 20020618	KR 1999-700727 19990129
OTHER SOURCE (S):	MAR	RPAT 129:	US 1998-120237 A3 19980722 95723

Q-
$$(AA)_m$$
-N-CHCO- $(AA)_n$ -N-CHCO- $(AA)_p$ -E

The novel conformationally constrained backbone cyclized AB somatostatin analogs I and II [m, n, p = independently 0-8; AA = amino acid residue wherein each amino acid residue may be the same or different; Q = H, acyl group; E = OH, carboxyl protective group, amino group, or the terminal carboxy group can be reduced to CH2OH; R1, R2 = independently optionally protected amino acid side chain; R = X-M-Y-W-Z, X-M-Z; M, W = independently amide, thioether, thioester, disulfide; X, Y, Z = independently alkylene, substituted alkylene, arylene, homo- or heterocycloarylene, substituted cycloalkylene] and combinatorial libraries thereof are disclosed. Methods for synthesizing the somatostatin analogs and for producing the libraries of the somatostatin analogs are also disclosed. Furthermore, pharmaceutical compns. comprising somatostatin analogs, and methods of using such compns. in the treatment of endocrine disorders, neoplasms and metabolic disorders are also disclosed. Thus, cyclopeptide III (PTR 3046) was prepd. by solid-phase methods on a Rink amide resin using 9-fluorenylmethoxycarbonyl (Fmoc) backbone protection and allyl protection for the cyclic amide residues. PTR 3046 and related cyclopeptides and combinatorial libraries were tested in vitro for binding to a variety of different somatostatin receptors in Chinese hamster ovary cells expressing the various receptors.

38916-34-6DP, Somatostatin, backbone cyclized analogs and combinatorial libraries 203116-99-8P 203117-00-4P 203117-01-5P 203117-02-6P 203117-03-7P 203117-06-0P 203200-47-9P, PTR 3046 209597-02-4P 203107-03-03-6P 203107-05-7P

209597-03-5P 209597-04-6P 209597-05-7P

209597-07-9P 209597-08-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized

somatostatin analogs and combinatorial libraries)

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1998:180781 HCAPLUS

DOCUMENT NUMBER:

128:239911

TITLE:

Pharmaceutical composition for the treatment of

syndrome X of Reaven

INVENTOR(S):

Cohen, Yarom

PATENT ASSIGNEE(S): SOURCE:

Cohen, Yarom, Israel PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	rent	NO.		KI	ND	DATE	•		A)	PPLI	CATI	ON NO	o. :	DATE			
WO	WO 9810786		 A	 2	19980319			WO 1997-IL301				19970910					
WO	WO 9810786			Α													
	W:	AL,	-AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FI,	GB,	GE,	GH,	HU,	ID,	IL,	IS,	JP,	ΚE,	KG,	KΡ,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,
						SD,										UA,	UG,
		US,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM		
	RW:	GH,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,
		GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
						SN,											
AU 9741339 A1 19					1998	0402						19970910					
PRIORITY APPLN. INFO.:								IL 1996-119250					19960912				
						IL 1996-119403					19961010						
								1	WO 1	997-	IL30	1		1997	0910		

MARPAT 128:239911 OTHER SOURCE(S):

The present invention relates to a pharmaceutical compn. comprising as AΒ active ingredient a compd. selected among somatostatin or one of its analogs, diazoxide or one of its analogs, cyclothiazide or one of its analogs and metformin, for the treatment of syndrome X of Reaven (also called "hyperinsulinemia syndrome").

38916-34-6, Somatostatin 38916-34-6D,

Somatostatin, analogs 77909-99-0 204707-70-0

204707-77-7 204995-48-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hyperinsulinemia treatment with somatostatin analogs)

L57 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1998:119596 HCAPLUS

DOCUMENT NUMBER:

128:226364

TITLE:

AUTHOR(S):

A Backbone-Cyclic, Receptor 5-Selective Somatostatin Analog: Synthesis, Bioactivity,

and Nuclear Magnetic Resonance Conformational Analysis

Gilon, Chaim; Huenges, Martin; Mathae, Barbara; Gellerman, Gary; Hornik, Vered; Afargan, Michel;

Amitay, Oved; Ziv, Ofer; Feller, Etty; Gamliel, Asher; Shohat, Dvira; Wanger, Mazal; Arad, Oded; Kessler,

Horst

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, Israel

SOURCE:

Journal of Medicinal Chemistry (1998), 41(6), 919-929

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

English LANGUAGE:

Cyclo(PheN2-Tyr-D-Trp-Lys-Val-PheC3)-Thr-NH2 (PTR 3046), a backbone-cyclic somatostatin analog was synthesized by solid-phase methodol. The binding characteristics of PTR 3046 to the different somatostatin receptors, expressed in CHO cells, indicate high selectivity to the SSTR5 receptor. PTR 3046 is highly stable against enzymic degrdn. as detd. in

vitro by incubation with rat renal homogenate and human serum. The biol. activity of PTR 3046 in vivo was detd. in rats. PTR 3046 inhibits bombesin- and caerulein-induced amylase and lipase release from the pancreas without inhibiting growth hormone or glucagon release. The major conformation of PTR 3046 in CD30H, as detd. by NMR, is defined by a type II' .beta.-turn at D-Trp-Lys and a cis amide bond at Val-PheC3.

IT 203200-47-9P, PTR 3046

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and bioactivity and NMR and conformation of a backbone-cyclic,

receptor 5-selective somatostatin analog)

L57 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1998:102893 HCAPLUS

DOCUMENT NUMBER:

128:180672

TITLE:

Conformationally constrained backbone cyclized

somatostatin analogs

INVENTOR(S):

Hornik, Vered; Seri-Levy, Alon; Gellerman, Gary;

Gilon, Chaim

PATENT ASSIGNEE(S):

Peptor Ltd., Israel; Yissum Research Development

Company of the Hebrew; Hornik, Vered; Seri-Levy, Alon;

Gellerman, Gary; Gilon, Chaim

SOURCE:

PCT Int. Appl., 97 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
                           _____
                                          _____
                                        WO 1997-IL261 19970730
                     A1
                           19980205
    WO 9804583
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
            LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,
            UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
            GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
            GN, ML, MR, NE, SN, TD, TG
                                          US 1996-690090
                                                           19960731
                           19980623
    US 5770687
                      Α
                           19980220
                                          AU 1997-36331
                                                           19970730
    AU 9736331
                      Α1
    AU 711100
                      В2
                           19991007
                                          EP 1997-932978
                                                          19970730
                      Α1
                           19990609
    EP 920446
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                           20000111
                                          BR 1997-10636
                                                           19970730
    BR 9710636
                      Α
                           20001212
                                          JP 1998-508666
                                                           19970730
    JP 2000516592
                      Т2
                                                      A 19960731
PRIORITY APPLN. INFO.:
                                       US 1996-690090
                                                       A2 19950607
                                       US 1995-488159
                                                       A2 19951207
                                       US 1995-569042
                                                       W 19970730
                                       WO 1997-IL261
```

OTHER SOURCE(S): MARPAT 128:180672

AB Methods for synthesizing cyclized **somatostatin** analogs Q-(AA)a-NR-CHR1-CO-(AA)b-NR-CHR2-CO-(AA)c-E(R2 = a bond, a-c are 0-8, AA is an amino acid residue, Q = H, acyl, E = OH, carboxy-protecting group, or amino group, or the terminal carboxyl group can be reduced to CH2OH) and for producing libraries of the **somatostatin** analogs are disclosed. Thus, SST-Gly6,Gly11 analogs bridged at positions 1-3 were prepd. manually or with an automatic peptide synthesizer. Physiol. examples are given.

IT 203116-99-8P 203117-00-4P 203117-01-5P

203117-02-6P 203117-03-7P 203117-05-9P 203117-06-0P 203117-07-1P 203117-08-2P 203117-09-3P 203117-10-6P 203117-11-7P

203200-47-9P, PTR-3046

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(conformationally constrained backbone cyclized somatostatin analogs)

9002-72-6, Growth hormone ΙT

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(conformationally constrained backbone cyclized somatostatin

analogs)

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

1995:568949 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

123:1202

Three-Dimensional Quantitative Structure-Activity TITLE:

Relationships of Somatostatin Analogs. 1.

Comparative Molecular Field Analysis of Growth Hormone

Release-Inhibiting Potencies

Hocart, Simon J.; Reddy, Vik; Murphy, William A.; Coy, AUTHOR(S):

David H.

School of Medicine, Tulane University, New Orleans, CORPORATE SOURCE:

LA, 70112, USA

Journal of Medicinal Chemistry (1995), 38(11), 1974-89 SOURCE:

CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society PUBLISHER:

Journal DOCUMENT TYPE: LANGUAGE: English

The previous work on the structure-activity relation of somatostatin and that of many others has generated a large database of analogs with different biol. activities and receptor affinities. This present work is an investigation of the growth hormone release-inhibiting potencies of somatostatin analogs by the 3-dimensional quant. structure-activity paradigm, comparative mol. field anal. (CoMFA). A total of 64 analogs were modeled in SYBYL using structural information from 2 NMR studies. The mols. were aligned by a root-mean-square fit of atoms and field-fit of the steric and electrostatic mol. fields and the resulting databases analyzed by partial least squares anal. with cross-validation to ext. the optimum no. of components. The anal. was then repeated without cross-validation to give the final QSAR models. Preliminary investigations with the CoMFA models led to the synthesis of a new somatostatin analog. This compd. together with 5 other newly synthesized compds. not included in the original training sets were used to test the predictive ability of the COMFA models. Two models with good predictive powers are presented.

38916-34-6D, Somatostatin, analogs 70512-60-6 ·IT 81710-70-5 81710-73-8, L 362862 81710-74-9

81710-75-0 163514-46-3 163514-47-4

163514-48-5 163514-49-6 163514-50-9

163514-51-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(three-dimensional QSARs of somatostatin analogs and comparative mol. field anal. of growth hormone release-inhibiting potencies)

L57 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN 1994:293143 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

120:293143

TITLE:

Radioactively-labeled somatostatin-derived peptides for imaging and therapeutic uses

INVENTOR(S):

Dean, Richard T.; Lister-James, John

PATENT ASSIGNEE(S):

Diatech, Inc., USA PCT Int. Appl., 36 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent

English

FAMILY ACC. NUM. COUNT:

44

PATENT INFORMATION:

P	ATENT NO.		KIND	DATE		APPLICATION NO.	DATE	
	9400489 9400489 W: AU,		A2 A3 JP, KR,	19940106 19940331		WO 1993-US6029	19930623	
	RW: AT,	BE,	CH, DE,	DK, ES,	FR,	GB, GR, IE, IT, LU,	MC, NL,	PT, SE
U	5 5716596		A	19980210		US 1992-902935	19920623	
A	J 9347688		A1	19940124		AU 1993-47688	19930623	
A	J 9347688 J 690071		B2	19980423				
E	649434 649434		A1	19950426		EP 1993-918129	19930623	
E	649434		В1	20010801				
			CH, DE,	DK, ES,	FR,	GB, IT, LI, NL, SE		
J	08503924	•	T2	19960430			19930623	
Ė	9 08503924 9 1094074		A2	20010425		EP 2000-122243	19930623	
E	2 1094074		A3	20020109				
	R: AT,	BE,	CH, DE,	DK, ES,	FR,	GB, IT, LI, NL, SE		
A			E.	20010815		AT 1993-918129	19930623	
E	T 203754 5 2164667 A 2138647		Т3	20020301		ES 1993-918129	19930623	
C.	A 2138647		С	20021112		CA 1993-2138647	19930623	
\mathbf{Z}_{i}	A 9307596		A	19940804		ZA 1993-7596	19931013	
A	A 9307596 J 9470990 J 701083		A1	19950117		ES 1993-918129 CA 1993-2138647 ZA 1993-7596 AU 1994-70990	19940603	
A	701083		В2	19990121				
E	720621		A1	19960710		EP 1994-920076	19940603	
	720621		В1	20010207				
	R: AT,	BE,	CH, DE,	DK, ES,	FR,	GB, GR, IE, IT, LI,	NL, SE	
A	г 199089	•	. E	20010215		AT 1994-920076		
	P 1092726		A2			EP 2000-122241	19940603	
	1092726		A3	20020109				
	R: AT,	BE,	CH, DE,	DK, ES,	FR,	GB, GR, IT, LI, NL,	SE, IE	
E	P 1099707		A2	20010516		EP 2000-122242	19940603	
E	P 1099707		A3	20020109				
	R: AT,	BE,	CH, DE,	DK, ES,	FR,	GB, GR, IT, LI, NL,	SE, IE	
E	s 2158897		Т3	20010916		ES 1994-920076	19940603	
Z.	S 2158897 A 9404498		Α	20010916 19960624		ZA 1994-4498	19940623	
U	S 5871711		A	19990216		US 1995-347397	19950113	
	5 5814298		A	19980929		US 1995-465764	19950606	
Ū	S 5820845		A A A	19981013		US 1995-347397 US 1995-465764 US 1995-466100	19950606	
	5 5833942		А	19981110		US 1995-470932	19950606	
Ū	S 5833942 S 5843401		A	19981201		US 1995-470932 US 1995-467025	19950606	
Ā	U 9877481		A1	19981001			19980723	
	TY APPLN.					US 1992-902935 A2	19920623	
1(101(1		21120	•				19930623	
						WO 1993-US6029 A	19930623	
						IIS 1993-92355 A	19930715	•
						EP 1994-920076 A	19940603	
						EP 1994-920076 A WO 1994-US6274 W	19940603	

MARPAT 120:293143

Peptide derivs. and analogs of somatostatin, and embodiments of such peptides labeled with 99mTc, 186Re, or 188Re are presented, as well as methods and kits for making, radiolabeling and using such peptides for imaging or therapy in a mammalian body. CH2CO-FFWDKTFCCAcmGCAcmamide (I)

was prepd. by solid phase peptide synthesis and radiolabeled with 99mTc. I inhibited binding of [125I-Tyr11] somatostatin-14 to AR42J rat pancreatic tumor cell membrane somatostatin receptors with a Ki = 0.16 nM.

51110-01-1D, Somatostatin, analogs, radiolabeled TT

RL: BIOL (Biological study)

(for scintigraphic imaging and therapy)

154887-73-7DP, Tc-99 labeled IT

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

154887-59-9P 154887-60-2P 154887-67-9P IT

154887-71-5P 154887-72-6P 154887-73-7P

154887-74-8P 154887-75-9P 154887-81-7P

154887-84-0P 154887-85-1P 154935-66-7DP, Tc-99

labeled 154935-66-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as somatostatin analog, for radiolabeling for scintigraphic imaging and therapy)

L57 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1993:662666 HCAPLUS

DOCUMENT NUMBER:

119:262666

TITLE:

Characterization of cloned somatostatin

receptors SSTR4 and SSTR5

AUTHOR(S):

Raynor, Karen; O'Carroll, Anne Marie; Kong, Haeyoung;

Yasuda, Kazuki; Mahana, Lawrence C.; Bell, Graeme I.;

Reisine, Terry

CORPORATE SOURCE:

Sch. Med., Univ. Pennsylvania, Philadelphia, PA,

19104, USA

SOURCE:

Molecular Pharmacology (1993), 44(2), 385-92

CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE:

Journal

LANGUAGE:

English The recent mol. cloning of the genes and cDNAs encoding multiple somatostatin (SRIF) receptor subtypes has allowed for the individual expression of these receptors in mammalian cells and characterization of their resp. pharmacol. profiles. Previously, the authors fully described and compared the pharmacol. properties of the first 3 SRIF receptor subtypes, SRIF receptor type (SSTR)1, SSTR2, and SSTR3. In the present study, the authors have investigated the properties of the newly cloned SRIF receptor subtypes SSTR4 and SSTR5 with regard to pharmacol. profiles, the regulation of high-affinity agonist binding to these receptors by stable GTP analogs, Na+, or prior exposure to agonists, and the inhibition of forskolin-stimulated cAMP accumulation mediated by these receptors. The authors labeled SSTR4 and SSTR5 expressed in Chinese hamster ovary (CHO-K1) and COS-1 cells, resp., with the metabolically stable SRIF analog 125I-CGP 23996. Radioligand binding competition studies were performed using SRIF analogs of differing structures, including hexapeptide analogs similar to MK 678, octapeptide analogs similar to SMS 201-995, pentapeptide analogs similar to c[Ahep-Phe-D-Trp-Lys-Thr(Bzl)], and linear SRIF analogs. SSTR4 bound compds. in all structural classes with high to moderate affinities, and several compds. were identified that are >100-fold selective for SSTR4, compared with the other cloned SRIF receptors, including the linear SRIF analog BIM 23052 and the CGP 23996-like SRIF analog L 362,855. In contrast, SSTR5 bound very few SRIF analogs with high affinity. Both receptors could be regulated by prior exposure to agonist. In addn., agonist binding to SSTR4 was reduced by stable GTP analogs, Na+ , and

pertussis toxin, but agonist binding to SSTR5 was not affected by these treatments. SSTR4 is efficiently coupled to the inhibition of adenylyl cyclase activity, whereas SSTR5 appears not to couple to this cellular effector system. Such differences between the cloned SRIF receptors provide useful strategies for identifying regions of these receptor

subtypes that may be involved in ligand-binding specificities and G protein and cellular effector system coupling. The identification of subtype-selective SRIF analogs may lead to more specific therapeutic interventions.

IT 38916-34-6, Somatostatin (sheep) 51110-01-1D, Somatostatin-14, analogs 58976-46-8 68463-41-2 73032-94-7, Somatostatin-28 (sheep) 81710-73-8 151396-54-2

RL: BIOL (Biological study)

(cloned **somatostatin** SSTR4 and SSTR5 receptors interaction with)

L57 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1993:574313 HCAPLUS

DOCUMENT NUMBER:

119:174313

TITLE:

Cloned somatostatin receptors:

Identification of subtype-selective peptides and demonstration of high affinity binding of linear

peptides

AUTHOR(S):

Raynor, Karen; Murphy, William A.; Coy, David H.; Taylor, John E.; Moreau, Jacques Pierre; Yasuda,

Kazuki; Bell, Graeme I.; Reisine, Terry

CORPORATE SOURCE:

Sch. Med., Univ. Pennsylvania, Philadelphia, PA,

19104, USA

SOURCE:

Molecular Pharmacology (1993), 43(6), 838-44

CODEN: MOPMA3; ISSN: 0026-895X

DOCUMENT TYPE: LANGUAGE: Journal English

The authors investigated the affinities of a battery of somatostatin (SRIF) analogs to bind to SRIF receptor subtypes SSTR1 (cloned somatostatin complex), SSTR2, and SSTR3, as well as their abilities to inhibit the release of growth hormone from anterior pituitary cells in vitro. SSTR1 and SSTR3 receptors expressed in Chinese hamster ovary and COS-1 cells, resp., were labeled with the metabolically stable SRIF analog 125I-CGP 23996. SSTR2 receptors expressed in Chinese hamster ovary cells were labeled with the SSTR2-specific radioligand 125I-MK-678. Inhibition studies were performed using SRIF analogs of differing structures, including hexapeptide analogs similar to MK-678, octapeptide analogs similar to SMS 201-995, pentapeptide analogs similar to c[Ahep-Phe-D-Trp-Lys-Thr(Bzl)] (SA), and linear SRIF analogs. bound SRIF and SRIF-28 with high affinity and the peptide SA and its structural analogs with low affinity. The hexapeptides did not interact with SSTR1 at concns. as high as 1 .mu.M, and only a few of the octapeptides or linear peptides bound, with very low affinities. contrast, 125I-MK-678 binding to SSTR2 was potently inhibited by the hexapeptides, octapeptides, and some of the linear compds., whereas SA and its analogs did not bind to SSTR2. The potencies of the various SRIF agonists to inhibit growth hormone release in vitro was highly correlated with their potencies to inhibit radioligand binding to SSTR2, but not to SSTR1 or SSTR3. SSTR3 bound analogs of each class but with moderate to low affinities, with the exception of several linear peptides and one of the octapeptides. For the first time the binding affinities of linear analogs of SRIF, some of which display subnanomolar affinities and are highly selective for SRIF receptor subtypes, are reported. Most importantly, these studies identify several peptide analogs that are highly potent, specific, and selective for individual subtypes of SRIF receptors. Such information, coupled with the knowledge of the distribution of these receptor subtypes in normal and pathol. tissues, will be crit. for more specific exptl. and therapeutic interventions.

IT 9002-72-6, Growth hormone

RL: BIOL (Biological study)

(release of, somatostatin analogs inhibition of, structure in relation to)

ΙT 38916-34-6, Somatostatin (sheep) 81710-73-8, L

362862 **135048-17-8**, BIM 23003 RL: BIOL (Biological study)

(somatostatin receptor subtype binding of, selectivity in relation to)

L57 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1988:32093 HCAPLUS

DOCUMENT NUMBER: TITLE:

108:32093 Immunological properties of novel somatostatin

analogs

AUTHOR(S):

Nakano, Takamitsu; Harano, Yutaka; Emura, Jyunji; Kimura, Terutoshi; Sakakibara, Shumpei; Kodaira,

Tsukasa; Shigeta, Yukio

CORPORATE SOURCE:

3rd Dep. Med., Shiga Univ. Med. Sci., Otsu, 520-21,

Japan

SOURCE:

Biomedical Research (1987), 8(5), 345-8

CODEN: BRESD5; ISSN: 0388-6107

DOCUMENT TYPE:

Journal LANGUAGE: English

Cross-reactivity of 6 novel somatostatin (SRIF) analogs was examd. by SRIF-specific RIAs using anti-SRIF sera OAL-272 or OAL-283. The analogs examd. possessed different chain-length in which the S-S linkages was replaced by a methylene bridge of .alpha.-amino suberic acid (D-Asu). In the assay using antiserum OAL-272, the labeled SRIF failed to displace any of the 6 analogs, whereas in the assay with antiserum OAL-283, 5 of the analogs with the exception of the shortest analog (Phe-D-Trp-Lys-Thr-D-Asu) were bound very weakly (0.01-0.06% vs. SRIF). The results indicate that antisera specific to each of the analogs will be required for assays of these analogs in biol. fluids.

TΤ 38916-34-6, Cyclic somatostatin 38916-34-6D,

Cyclic somatostatin, analogs 70717-67-8

RL: BIOL (Biological study)

(immunol. properties of, mol. structure in relation to)

ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1986:454728 HCAPLUS

DOCUMENT NUMBER:

105:54728

TITLE:

Development of specific and non-specific

somatostatin analogs

AUTHOR(S):

Nakano, T.; Harano, Y.; Emura, J.; Kimura, T.; Sakakibara, S.; Shigeta, Y.

CORPORATE SOURCE: SOURCE:

Third Dep. Med., Shiga Univ. Med. Sci., Shiga, Japan Hormone and Metabolic Research (1986), 18(2), 98-102

CODEN: HMMRA2; ISSN: 0018-5043

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The biol. activities of 6 cyclic somatostatin analogs contg. AΒ D-.alpha.-aminosuberic acid (D-Asu) were examd. Cyclo(Phe-Phe-D-Trp-Lys-Thr-Phe-D-Asu) (I) [70717-67-8] had a suppressive effect on growth hormone (GH) [9002-72-6] secretion but had little if any effect on insulin [9004-10-8], gastrin [9002-76-0], or glucagon [9007-92-5] secretion in rats. Cyclo(Asn-Phe-Phe-D-Trp-Lys-Thr-Phe-Thr-D-[103314-81-4] suppressed GH and insulin secretion, but not gastrin or glucagon secretion. Cyclo(Lys-Asn-Phe-Phe-D-Trp-Lys-Thr-Phe-Thr-Ser-D-Asu) (II) [75172-41-7] and cyclo(Lys-Asn-Phe-Phe-D-Trp-Lys-Thr-Phe-D-Asu) [103314-80-3] had broad suppressive effects on GH, gastrin, insulin, and glucagon release after arginine infusion. The shortest analog cyclo(Phe-D-Trp-Lys-Thr-D-Asu) [103314-79-0] had a week suppressive effect for GH, insulin, and glucagon secretion. Apparently, phenylalanine in the 6 and 11 positions of somatostatin are necessary for the suppression of GH. I may be useful for the future treatment for acromegaly and diabetic retinopathy. II and III are

Audet 734583-claim 7 candidates for a wide variety of clin. applications. 38916-34-6D, analogs 70717-67-8 ΙT RL: BIOL (Biological study) (gastrointestinal hormone secretion response to, mol. structure in relation to) IT 9002-72-6 RL: BIOL (Biological study) (secretion of, cyclic somatostatin analogs effect on, mol. structure in relation to) ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN ACCESSION NUMBER: 1983:416912 HCAPLUS DOCUMENT NUMBER: 99:16912 TITLE: Somatostatin receptor binding in rat cerebral cortex. Characterization using a nonreducible somatostatin analog AUTHOR(S): Czernik, Andrew J.; Petrack, Barbara Res. Dev. Dep., CIBA-GEIGY Corp., Ardsley, NY, 10502, CORPORATE SOURCE: Journal of Biological Chemistry (1983), 258(9), SOURCE: 5525-30 CODEN: JBCHA3; ISSN: 0021-9258 DOCUMENT TYPE: Journal English LANGUAGE: Specific, saturable, reversible, high-affinity binding sites for somatostatin [51110-01-1] were identified in synaptosomal membrane prepns. of rat cerebral cortex, using the nonreducible analog, CGP 23996 (des-Ala1, Gly2-desamino-Cys3-[Tyr11]dicarba3,14-somatostatin) [86170-12-9]. This analog, labeled with 125I, was significantly more resistant to degrdn. than N-125I-tyrosinyl-somatostatin and 125I-11-tyrosinesomatostatin during binding assays performed at 37.degree..

synaptosomal membrane prepns. of rat cerebral cortex, using the nonreducible analog, CGP 23996 (des-Ala1, Gly2-desamino-Cys3-[Tyr11]-dicarba3,14-somatostatin) [86170-12-9]. This analog, labeled with 125I, was significantly more resistant to degrdn. than N-125I-tyrosinyl-somatostatin and 125I-11-tyrosine-somatostatin during binding assays performed at 37.degree.

Bacitracin (20 .mu.g/mL) and MgCl2 (5 mM) each afforded further protection from degrdn., and in their presence 125I-CGP 23996 was almost fully protected (3% degrdn.). Specific binding of 125I-CGP 23996 reached steady state in 30 min and was stable for an addnl. 60 min. Scatchard anal. of binding data was linear, yielding a dissocn. const. of 2.4 nM and a maximal binding capacity of 450 fmol/mg of protein. The dissocn. const. derived from kinetic data was 2.6 nM. Somatostatin exhibited competitive inhibition of 125I-CGP 23996 binding, whereas unrelated neuropeptides were ineffective in displacing specific binding. The regional distribution of binding sites in rat brain was variable, with the highest levels in cerebral cortex and hippocampus and little binding in cerebellum. There was a good correlation between relative potency values of somatostatin analogs detd. in the binding expts. and in the isolated perfused rat pancreas bioassay. The use of 125I-CGP 23996 as the radioligand has permitted an accurate characterization of

somatostatin receptor binding in rat brain in physiol. temp.

IT 51110-01-1

RL: BIOL (Biological study)

(receptor for, of brain, characterization of)

IT 51110-01-1D, analogs 62802-82-8 67392-91-0

70512-60-6 77909-99-0 83465-19-4

86179-34-2

RL: PROC (Process)

(somatostatin receptor binding of, in brain)

L57 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:450069 HCAPLUS

DOCUMENT NUMBER: 97:50069

TITLE: Characterization of pituitary membrane receptors for

somatostatin in the rat

AUTHOR(S): Srikant, C. B.; Patel, Y. C.

Audet 734583-claim 7

CORPORATE SOURCE:

Fraser Lab., McGill Univ., Montreal, QC, H3A 1A1, Can.

SOURCE:

AB

Endocrinology (1982), 110(6), 2138-44

CODEN: ENDOÃO; ISSN: 0013-7227

DOCUMENT TYPE:

Journal English

LANGUAGE:

The presence of specific receptors for somatostatin (SRIF) [51110-01-1] in normal rat pituitary membranes have been demonstrated using [1251] -tyrosine11-SRIF as the radioligand. receptors bind SRIF with high affinity (Ka .apprx.0.47 .times. 1010M-1) and have a max. binding capacity of 0.095 pmol/mg membrane protein. other radioiodinated SRIF analogs which contain N-terminally suited radiolabel, [125I]-tyrosine1-SRIF and [125I]-N-tyrosine-SRIF, were found unsuitable for receptor binding studies due to loss of the radiolabel from the ligand mol. under the exptl. conditions employed. Binding of [125I]-tyrosinel1-SRIF to these receptors was specific and was not influenced by a variety of other neuropeptides. The specificity of SRIF receptors was also examd. using 10 synthetic SRIF analogs as well as catfish somatostatin I [73726-55-3]. Catfish somatostatin I was 8.3 times less potent than SRIF in binding to SRIF receptors, although it has been reported to be equipotent in terms of in vitro growth hormone (GH) [9002-72-6] inhibition. Analogs which exhibit greater potency for GH inhibition in vitro bound to these receptors with greater affinities than SRIF, whereas biol. inactive analogs showed markedly reduced binding, suggesting that the in vitro GH inhibitory actions of SRIF analogs are related to their ability to

51110-01-1 TΨ

RL: BIOL (Biological study)

interact with SRIF receptors.

(receptors for, of pituitary gland cell membrane)

IT 9002-72-6

RL: BIOL (Biological study)

(secretion of, somatostatin analogs inhibition of, receptor

binding in pituitary gland in relation to)

58959-60-7 58976-46-8 59481-27-5 IT

61950-59-2 66582-76-1 67392-89-6

67392-91-0 70512-60-6 73107-31-0

73236-68-7 73726-55-3

RL: BIOL (Biological study)

(somatostatin receptor binding of, in pituitary gland, growth

hormone inhibition in relation to)

L57 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1982:439343 HCAPLUS

DOCUMENT NUMBER:

97:39343

TITLE:

Functional group spectroscopy of peptides - an application of Fourier transform infrared (FTIR)

absorbance subtraction

AUTHOR(S):

Ryan, James Arthur

CORPORATE SOURCE:

Merck Sharp and Dohme Res. Lab. Div., Merck and Co.,

Inc., West Point, PA, 19486, USA

SOURCE:

Proceedings of SPIE-The International Society for Optical Engineering (1981), 289(Int. Conf. Fourier

Transform Infrared Spectrosc.), 179-81

CODEN: PSISDG; ISSN: 0277-786X

DOCUMENT TYPE:

Journal

LANGUAGE:

English

For diagram(s), see printed CA Issue.

The title spectroscopy was applied to **somatostatin** analogs I (R AΒ = H, Cl, NO2, OH, NH2, X = Thr; R = H, X = Ser, Val), II, and III (Acm = . CH2NHAc). When I (R = NO2, X = Thr) was mixed with bovine serum albumin, the 1518 and 1345 wave no. NO2 bands of the NO2 group were easily detectable by absorbance subtraction. This technique can be used for functional group anal. of proteins.

```
ΙT
     51110-01-1D, analogs
     RL: PRP (Properties)
        (IR spectra of, Fourier transform IR absorbance subtraction in relation
     70512-60-6 81710-70-5 81710-73-8
TΤ
     81710-74-9 81710-75-0 81710-92-1
     81710-94-3
     RL: PRP (Properties)
        (IR spectrum of, Fourier transform IR absorbance subtraction in
        relation to)
L57 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                         1982:193607 HCAPLUS
DOCUMENT NUMBER:
                         96:193607
                         Synthesis and biological activity of
TITLE:
                         somatostatin analogs of reduced ring size
AUTHOR(S):
                         Brady, S. F.; Nutt, R. F.; Holly, F. W.; Paleveda, W.
                         J.; Strachan, R. G.; Bergstrand, S. J.; Veber, D. F.;
                         Saperstein, R.
                         Merck Sharp Dohme Res. Lab., West Point, PA, 19486,
CORPORATE SOURCE:
                         USA
SOURCE:
                         Pept.: Synth., Struct., Funct., Proc. Am. Pept.
                         Symp., 7th (1981), 653-6. Editor(s): Rich, Daniel H.;
                         Gross, Erhard. Pierce Chem. Co.: Rockford, Ill.
                         CODEN: 47LMAO
DOCUMENT TYPE:
                         Conference
LANGUAGE:
                         English
     The cyclic heptapeptide analog cyclic-(Aha-Phe-Phe-D-Trp-Lys-Thr-Phe) (I)
     [70512-60-6] along with 34 other cyclic analogs of
     somatostatin were synthesized by solid phase methods and tested
     for their ability to inhibit growth hormone [9002-72-6],
     insulin [9004-10-8], and glucagon [9007-92-5] release to assess the
     relative influence of the 7-10 amino acid residues of natural
     somatostatin on biol. potency. A wide range of arom. nuclei as
     substitutions at position 7 were without effect on biol. potency relative
     to I. Variations at position 8 produced a marked loss of potency relative
           Derivatization of the lysine side chain at position 9 produced a
     complete loss of biol. potency. The primary .epsilon.-NH2 group of lysine
     at position 9 was essential for activity. Variations at position 10, such
     as deletion, addn. of a Me group, or .alpha.-substitution, decreased
     stability, suggesting a role for threonine in detg. the correct
     conformation for the peptide.
ΙT
     9002-72-6
     RL: BIOL (Biological study)
        (release of, somatostatin analog inhibition of, structure in
        relation to)
     70512-60-6 72983-06-3 81710-70-5
TT
     81710-72-7 81710-73-8 81710-74-9
     81710-75-0 81710-81-8 81710-82-9
     81710-83-0 81710-88-5 81710-89-6
     81710-92-1 81710-94-3 81726-61-6
     81726-62-7 81797-01-5
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); BIOL (Biological study)
        (somatotropin release inhibition by, structure in relation
L57 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                         1981:114892 HCAPLUS
```

94:114892

the rat

DOCUMENT NUMBER:

TITLE:

Somatostatin analogs. Dissociation of brain

receptor binding affinities and pituitary actions in

Audet 734583-claim 7

AUTHOR(S):

Srikant, C. B.; Patel, Y. C.

CORPORATE SOURCE:

Fraser Lab., McGill Univ., Montreal, QC, H3A 1A1, Can.

Endocrinology (1981), 108(1), 341-3

CODEN: ENDOÃO; ISSN: 0013-7227

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

English

A radioreceptor assay was used to examine the ability of 16 somatostatin (SRIF) [38916-34-6] analogs to interact

with the receptors of rat brain synaptosomal membranes. Although structural modifications in the 8-tryptophan moiety of SRIF resulted in enhancement of affinity for binding to the brain SRIF receptors, the different relative specificities of des-amino acid1,2,4,5,12,13-Dtryptophan8-SRIF [70952-36-2], D-tryptophan8-SRIF [58976-46-8], and 5-bromo-D-tryptophan8-SRIF [67392-89-6] in the pituitary and the central nervous system suggest that basic differences exist between SRIF receptors present in the brain and the pituitary.

58959-60-7 58976-46-8 59481-27-5

61425-92-1 61518-60-3 61950-59-2

66582-76-1 67374-96-3 67392-89-6

67392-91-0 70512-60-6 73107-31-0

76840-18-1

RL: PROC (Process)

(brain synaptosome binding of, structure in relation to)

TΤ 38916-34-6

RL: PROC (Process)

(receptor binding of, in brain synaptosome, structure in relation to)

L57 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1980:104734 HCAPLUS

DOCUMENT NUMBER:

92:104734

TITLE:

TT

Highly active cyclic and bicyclic somatostatin

analogs of reduced ring size

AUTHOR(S):

Veber, Daniel F.; Holly, Frederick W.; Nutt, Ruth F.;

Bergstrand, Susan J.; Brady, Stephen F.; Hirschmann, Ralph; Glitzer, Monroe S.; Saperstein, Richard

CORPORATE SOURCE:

Merck Sharp Dohme Res. Lab., West Point, PA, 19486,

USA

SOURCE:

Nature (London, United Kingdom) (1979), 280(5722),

512-14

CODEN: NATUAS; ISSN: 0028-0836

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

NH(CH2)6CO-Cys-Phe-D-Trp-Lys-Thr-Cys-CO III

Two conformationally constrained analogs of somatostatin (I) AB 38916-34-6] were synthesized, cyclo-(.omega.-aminoheptanoate-Phe-Phe-D-Trp-Lys-Thr-Phe) (II) [70512-60-6] and the bicyclic analog III [70706-79-5], III contained only amino acids 7-10 of I. II, and particularly, III showed high biol. activity. The high activity of II and III indicated that binding of I to receptors was due chiefly to amino acids 7-10. III was relatively resistant to trypsin hydrolysis in vitro but II was cleaved by trypsin at .apprx.100-fold the rate of hydrolysis of III; the disulfide bond of III appeared to add enzymic stability, either through conformational or steric constraint. Seventy-five minutes after s.c. administration of I, II, and III (50, 50, and 25 .mu.g, resp.) to

rats, both II and III inhibited the release of growth hormone (GH) whereas I did not; at 135 min after injection, only III showed inhibition of GH release. Thus, amino acids 7-10 of I, when constrained in the correct conformation, contain receptor binding elements sufficient to express the total activity of I for suppression of the release of insulin, glucagon, and GH. Conformationally constrained structures can therefore be designed to decrease susceptibility to metab. while retaining biol. activity.

38916-34-6 TΤ

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (biol. activity of, structure in relation to)

70512-60-6P 72983-06-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and biol. activity of)

L57 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1979:457549 HCAPLUS

DOCUMENT NUMBER:

91:57549

TITLE:

Somatostatin analogs

INVENTOR(S):

Veber, Daniel F.

PATENT ASSIGNEE(S):

Merck and Co., Inc., USA

SOURCE:

U.S., 10 pp.

DOCUMENT TYPE:

CODEN: USXXAM

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4146612 EP 53 EP 53	A A1 B1	19790327 19781220 19810527	US 1978-920529 EP 1978-100095	19780629 19780606
R: BE, C DK 7802527 PRIORITY APPLN. IN GI	A	, GB, LU, 19781209	NL, SE DK 1978-2527 US 1977-804678	19780607 19770608

Somatostatin analogs I [X = Phe, Tyr, Tyr(Me); X1 = Phe, Tyr; X2 AB = Trp, D-Trp; X3 = Thr, Val; R = H, CO2H] and their pharmaceutically acceptable nontoxic acid addn. salts, useful as inhibitors of the release of growth hormone, glucagon, and insulin, were prepd. I can be used in the treatment of acromegaly and the management of diabetes. Thus, BOC-D-Trp-Lys(ZC1-2)-Thr(CH2PH)-Phe-NH(CH2)6CO-Phe-Phe-O-resin (BOC = Me3CO2C, ZC1-2 = CO2CH2C6H4C1-2) was prepd. by the solid-phase method, deblocked, and resin-cleaved with NH2NH2 to give H-D-Trp-Lys(ZCl-2)-Thr (CH2Ph) - Phe-NH (CH2) 6CO-Phe-Phe-NHNH2. The latter was converted to the azide and cyclized to give cyclo[NH(CH2)6CO-Phe-Phe-D-Trp-Lys(ZCl-2)-Thr(CH2PH)-Phe], which was deblocked with HF/anisol to give somatostatin analog II.

IT 70717-64-5P 70717-66-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and deblocking of)

IT 70512-60-6P 70717-67-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of)

IT **51110-01-1DP**, analogs

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, by solid-phase method)

IT 9002-72-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(release of, somatostatin analogs inhibition of)

L57 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1979:421128 HCAPLUS

DOCUMENT NUMBER:

91:21128

TITLE:

Somatostatin analogs

PATENT ASSIGNEE(S):

Merck and Co., Inc., USA

SOURCE:

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

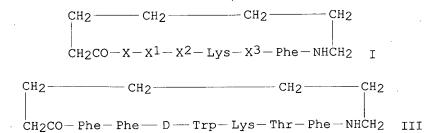
LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 54003085	A2	19790111	JP 1978-68723	19780607
EP 53	A1	19781220	EP 1978-100095	19780606
EP 53	B1	19810527		
R: BE, CH,	DE, FR	, GB, LU, NL,	SE .	
DK 7802527	A	19781209	DK 1978-2527	19780607
PRIORITY APPLN. INFO.	:		US 1977-804678	19770608
GI			•	



AB Somatostatin analogs I [X = Phe, Tyr, Tyr(Me); X1 = Phe, Tyr; X2 = Trp, D-Trp; X3 = Thr, Val] were prepd. Thus, H-D-Trp-Lys(CO2CH2C6H4Cl-2)-Thr(CH2Ph)-Phe-NH(CH2)6CO-Phe-Phe-R (II, R = O-resin) was prepd. by the solid-phase method and then resin-cleaved with NH2NH2 to give II (R = NHNH2), which was converted to the azide and cyclized to give the protected cyclic peptide, which was deblocking to give somatostatin analog III.

IT 51110-01-1DP, analogs 70512-60-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

=> select hit rn 157 1-18 E307 THROUGH E391 ASSIGNED => fil reg FILE 'REGISTRY' ENTERED AT 11:31:34 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d his 158

(FILE 'HCAPLUS' ENTERED AT 11:31:06 ON 22 JUL 2003) SELECT HIT RN L57 1-18

FILE 'REGISTRY' ENTERED AT 11:31:34 ON 22 JUL 2003 L58 58 S L54 AND E307-E391

=> d .seq 158 1-58

L58 ANSWER 1 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209597-08-0 REGISTRY

CN L-Valinamide, N-(2-carboxyethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-(3-aminopropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

tvpe		location	description			
bridge stereo	Phe-1 Trp-3	- Phe-6	covalent bridge D			

SQL '

RN 209597-08-0 REGISTRY

SQL 7

SEQ 1 FFWKTFV

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 129:95723

L58 ANSWER 2 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN

RN 209597-07-9 REGISTRY

CN L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam

```
(9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
-----
             ----- location ----- description
            _______
            Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
stereo
SQL 7
RN
    209597-07-9 REGISTRY
SQL 7
SEQ
       1 FYWKTFV
HITS AT: 1-7
REFERENCE 1: 129:95723
L58 ANSWER 3 OF 58. REGISTRY COPYRIGHT 2003 ACS on STN
RN
   209597-05-7 REGISTRY
   L-Threoninamide, N-(3-aminopropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
CN
    lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam
    (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
            ----- location ----- description
bridge Phe-1 - Phe-6 covalent bridge stereo Trp-3 - D
-----------<del>-</del>
RN
  209597-05-7 REGISTRY
SQL 7
SEQ
      1 FYWKTFT
       . ======
HITS AT:
       1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
        1: 129:95723
L58 ANSWER 4 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
   209597-04-6 REGISTRY
   L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
   lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam
   (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
----- location ----- description
type .
Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
stereo
SQL 7
   209597-04-6 REGISTRY
RN
SQL 7
SEO
      1 FYWKTFT
        ======
HITS AT: 1-7
```

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

```
REFERENCE 1: 129:95723
   ANSWER 5 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    209597-03-5 REGISTRY
RN
CN
    L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
    lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam
    (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
______
      ----- location ----- description
______
        Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
stereo
   209597-03-5 REGISTRY
SQL 7
SEQ
       1 FYWKVFV
HITS AT:
       1-7
REFERENCE 1: 129:95723
L58 ANSWER 6 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
   209597-02-4 REGISTRY
CN
   L-Threoninamide, N-carboxy-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-
    valy1-N-(3-aminopropy1)-L-phenylalany1-, (1.fwdarw.6)-lactam (9CI) (CA
    INDEX NAME)
NTE modified (modifications unspecified)
_______
type ----- location ----- description
______
        Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
stereo
______
SQL 7
RN
   209597-02-4 REGISTRY
SQL 7
      1 FYWKVFT
SEO
         _____
HITS AT:
        1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 129:95723
   ANSWER 7 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
   204707-77-7 REGISTRY
RN
   {\tt Cyclo}\,({\tt L-lysyl-L-threonyl-L-phenylalanyl-8-aminooctanoyl-L-phenylalanyl-4-new language})
CN
   chloro-L-phenylalanyl-D-tryptophyl) (9CI) (CA INDEX NAME)
NTE cyclic
   modified (modifications unspecified)
______
       ----- location ----- description
uncommon Oaa-4 modification Phe-6
                        -
                                chloro<Cl>
SQL 7
```

RN

204707-77-7 REGISTRY

```
Audet 734583-claim 7
SQL 7
SEQ
        1 KTFXFFW
         1-4, 5-7
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 128:239911
L58 ANSWER 8 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    203200-47-9 REGISTRY
RN
CN
    L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
    lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam
    (9CI) (CA INDEX NAME)
OTHER NAMES:
CN PTR 3046
NTE modified (modifications unspecified)
______
             ----- location ----- description
bridge Phe-1 - Phe-6 covalent bridge stereo Trp-3 - D
SQL 7
RN 203200-47-9 REGISTRY
SQL 7
SEQ
       1 FYWKVFT
         ======
HITS AT:
         1 - 7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 129:95723
REFERENCE 2: 128:226364
REFERENCE 3: 128:180672
L58 ANSWER 9 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    203117-11-7 REGISTRY
CN
    L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-
    L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-,
    (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
              ----- location ----- description
______
bridge Phe-1 - Phe-6 covalent bridge stereo Trp-3 - D
SQL 7
    203117-11-7 REGISTRY
RN
SQL 7
SEQ
       1 FFWKTFV
```

SEQ 1 FFWKIFV =======

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 128:180672

```
L58 ANSWER 10 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    203117-10-6 REGISTRY
RN
CN
    L-Threoninamide, N-(3-aminopropyl)-L-phenylalanyl-L-phenylalanyl-D-
    tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-,
    (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
      ----- location ----- description
______
        Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
·stereo
RN 203117-10-6 REGISTRY
SQL 7
SEQ
       1 FFWKTFT
HITS AT: 1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 128:180672
L58 ANSWER 11 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    203117-09-3 REGISTRY
RN
    L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-
    tryptophyl-L-lysyl-L-threonyl-N-(3-carboxypropyl)-L-phenylalanyl-,
    (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
        ----- location ----- description
          Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
stereo
SQL 7
RN
    203117-09-3 REGISTRY
SQL 7
       1 FFWKTFT
SEO
         ======
HITS AT:
         1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 128:180672
L58 ANSWER 12 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    203117-08-2 REGISTRY
RN
    L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-L-lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-,
    (6.fwdarw.1)-lactam (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
_____
         ----- location ----- description
-----
       Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
RN 203117-08-2 REGISTRY
```

```
SOL 7
SEQ
        1 FFWKVFT
          1-7
HITS AT:
REFERENCE 1: 128:180672
    ANSWER 13 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
    203117-07-1 REGISTRY
RN
    L-Valinamide, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-
CN
    L-lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam
    (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
        ----- location ----- description
203117-07-1 REGISTRY
SOL 7
SEQ
      1 FFWKVFV
HITS AT:
        1-7
REFERENCE 1: 128:180672
L58 ANSWER 14 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    203117-06-0 REGISTRY
RN
    L-Threoninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl-N-(3-aminopropyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam
    (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
               ----- location ----- description
          Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
stereo
    203117-06-0 REGISTRY
SQL 7
SEQ .
       1 FYWKVFT
         ======
         1-7
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 129:95723
REFERENCE 2: 128:180672
L58
   ANSWER 15 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    203117-05-9 REGISTRY
RN
CN
    L-Threoninamide, N-(carboxymethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
    lysyl-L-valyl-N-(3-aminopropyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam (9CI)
```

(CA INDEX NAME)

NTE modified (modifications unspecified)

Audet 734583-claim 7

```
----- location ----- description
type
Phe-1 - Phe-6 covalent bridge Trp-3 - D
bridge
stereo
SQL 7
RN
   203117-05-9 REGISTRY
SQL 7
      1 FYWKVFT
SEQ
HITS AT:
       1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
       1: 128:180672
REFERENCE
L58
   ANSWER 16 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
   203117-03-7 REGISTRY
   L-Threoninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
   L-lysyl-L-valyl-N-(2-aminoethyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam
   (9CI) (CA INDEX NAME)
  modified (modifications unspecified)
type ----- location ----- description
______
           Phe-1 - Phe-6 covalent bridge
                     -
                               D
______
RN 203117-03-7 REGISTRY
SQL 7
SEQ
      1 FYWKVFT
HITS AT:
        1 - 7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 129:95723
REFERENCE
       2: 128:180672
   ANSWER 17 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
RN
   203117-02-6 REGISTRY
   L-Threoninamide, N-(2-carboxyethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
   L-lysyl-L-valyl-N-(2-aminoethyl)-L-phenylalanyl-, (1.fwdarw.6)-lactam
   (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
_____
           ----- location ----- description
_____
           Phe-1 - Phe-6 covalent bridge Trp-3 - D
        Trp-3
bridge
stereo
SQL 7
   203117-02-6 REGISTRY
RN
SQL 7
SEO
      1 FYWKVFT
        ======
HITS AT:
        1-7
```

```
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                           1: 129:95723
REFERENCE
REFERENCE 2: 128:180672
L58 ANSWER 18 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
           203117-01-5 REGISTRY
RN
            L-Threoninamide, \ N-(3-aminopropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tyrophyl-D-tyrophyl-L-phenylalanyl-L-tyrosyl-D-tyrophyl-L-tyrosyl-D-tyrophyl-L-tyrosyl-D-tyrophyl-L-tyrosyl-D-tyrophyl-D-tyrophyl-L-tyrosyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl-D-tyrophyl
CN
           lysyl-L-valyl-N-(2-carboxyethyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam
            (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
                    ----- location ----- description
bridge Phe-1 - Phe-6 covalent bridge stereo Trp-3 - D
SQL 7
           203117-01-5 REGISTRY
RN
SQL 7
SEO
                    1 FYWKVFT
HITS AT:
                        1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                       1: 129:95723
REFERENCE
REFERENCE 2: 128:180672
L58 ANSWER 19 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
           203117-00-4 REGISTRY
RN
           L-Threoninamide, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
CN
           lysyl-L-valyl-N-(2-carboxyethyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam
            (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
                     ----- location ----- description
_____
bridge Phe-1 - Phe-6 covalent bridge stereo Trp-3 - D
SQL 7
           203117-00-4 REGISTRY
RN
SQL 7
SEO
                    1 FYWKVFT
                         ======
                         1-7
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 129:95723
REFERENCE
                        2: 128:180672
L58 ANSWER 20 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
            203116-99-8 REGISTRY
RN
```

L-Threoninamide, N-(3-aminopropyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-

lysyl-L-valyl-N-(3-carboxypropyl)-L-phenylalanyl-, (6.fwdarw.1)-lactam

CN

(9CI) (CA INDEX NAME)

```
NTE modified (modifications unspecified)
_____
 type ----- location ----- description
.
------
bridge Phe-1 - Phe-6 covalent bridge stereo Trp-3 - D
SQL 7
RN
         203116-99-8 REGISTRY
SQL 7
                 1 FYWKVFT
SEQ
HITS AT: 1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 129:95723
REFERENCE 2: 128:180672
L58 ANSWER 21 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
          163514-51-0 REGISTRY
          \verb|L-Phenylalanine|, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-ph
         methoxy-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
          (9CI) (CA INDEX NAME)
       cyclic
         modified (modifications unspecified)
______
                                ----- location ----- description
_____
uncommon Oaa-4
RN 163514-51-0 REGISTRY
SQL 7
              1 KTFXFFW
SEQ
HITS AT: 1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 123:1202
        ANSWER 22 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
          163514-50-9 REGISTRY
RN
          L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-
CN
          bromo-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
          (CA INDEX NAME)
NTE cyclic
         modified (modifications unspecified)
 _____
                                 ----- location ----- description
uncommon Oaa-4 modification Trp-7
                                                   -
-
                                                                                   bromo<Br>
SOL 7
RN 163514-50-9 REGISTRY
SQL 7
```

SEQ

1 KTFXFFW

```
HITS AT: 1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 123:1202
L58 ANSWER 23 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    163514-49-6 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-6-
CN
    fluoro-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
    (CA INDEX NAME)
NTE
   cyclic
    modified (modifications unspecified)
              ----- location -----
                                       description
_____
uncommon Oaa-4
modification Trp-7
                                 fluoro<F>
                           _
   163514-49-6 REGISTRY
RN
SQL 7
SEQ
      1 KTFXFFW
HITS AT:
        1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
         1: 123:1202
L58 ANSWER 24 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    163514-48-5 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-
CN.
    fluoro-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
    (CA INDEX NAME)
NTE cyclic
    modified (modifications unspecified)
      ----- location ----- description
_____
uncommon Oaa-4 modification Trp-7
                                     fluoro<F>
SQL 7
    163514-48-5 REGISTRY
RN
SQL 7
        1 KTFXFFW
SEO
         ======
         1-4, 5-7
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
         1: 123:1202
L58 ANSWER 25 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    163514-47-4 REGISTRY
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-
CN
    methyl-L-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
    (CA INDEX NAME)
```

NTE

cyclic

```
modified (modifications unspecified)
_____
     ----- location ----- description
uncommon Oaa-4 modification Trp-7
                               methyl<Me>
SQL 7
    163514-47-4 REGISTRY
RN
SQL 7
   1 KTFXFFW
SEQ
HITS AT: 1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 123:1202
L58 ANSWER 26 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    163514-46-3 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-fluoro-L-
    phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
    (9CI) (CA INDEX NAME)
NTE cyclic
    modified (modifications unspecified)
_____
             ----- location ----- description
_____
uncommon Oaa-4 - modification Phe-6 -
                                   fluoro<F>
    163514-46-3 REGISTRY
RN
SQL 7
   1 KTFXFFW
SEQ
         ======
HITS AT: 1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1: 123:1202
REFERENCE
L58 ANSWER 27 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN RN 154935-66-7 REGISTRY
    L-Cysteinamide, N-(bromoacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-
CN
    L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-mercapto-2-
    methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)- (9CI) (CA INDEX
    NAME)
NTE modified (modifications unspecified)
              ----- location ----- description
modification Phe-1
                                   bromoacetyl<Bac>
SQL 7
RN 154935-66-7 REGISTRY
SQL 7
    1 FFWKTFC
ŚEO
        ======
```

HITS AT: 1-7

```
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 120:293143
L58 ANSWER 28 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    154887-85-1 REGISTRY
RN
    D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
            ----- location ----- description
modification Phe-1 - bromoacetyl<Bac>
SOL 7
RN
   154887-85-1 REGISTRY
SQL 7
SEQ
       1 FYWKTFC
        ======
HITS AT: 1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 120:293143
L58 ANSWER 29 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    154887-84-0 REGISTRY
RN
    L-Norvaline, N-[N-[N-[N-[N-[N-[N-(bromoacetyl)-L-phenylalanyl]-L-
CN
    phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-5-
    mercapto- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
        ----- location -----
                                      description
          Nva-7
Trp-3
uncommon
                                  D
stereo
SOL 7
   154887-84-0 REGISTRY
SQL 7
SEQ
       1 FFWKTFX
         ======
        1-7
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1: 120:293143
REFERENCE
   ANSWER 30 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
    154887-81-7 REGISTRY
RN
    L-Homocysteine, N-[N-[N-[N-[N-[N-(bromoacetyl)-L-phenylalanyl]-L-
CN
    phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI)
    (CA INDEX NAME)
NTE modified (modifications unspecified)
______
           · ----- location ----- description
______
uncommon Hcy-7 modification Phe-1
                                  bromoacetyl<Bac>
```

```
SQL
    154887-81-7 REGISTRY
RN
SQL
    7
       1 FFWKTFX
SEQ
HITS AT:
         1 - 7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
         1: 120:293143
L58
   ANSWER 31 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    154887-75-9 REGISTRY
RN
    L-Cysteinamide, N-(bromoacetyl)-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-
    L-lysyl-L-threonyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
_____
             ----- location -----
______
terminal mod. Cys-7 - modification Phe-1 -
                                    C-terminal amide
                                   bromoacetyl<Bac>
SQL 7
    154887-75-9 REGISTRY
RN
SQL 7
SEQ
       1 FFWKTFC
         ======
HITS AT:
         1 - 7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
         1: 120:293143
REFERENCE
    ANSWER 32 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
    154887-74-8 REGISTRY
RN
    L-Cysteine, N-[N-[N-[N-[N-[N-(bromoacetyl)-L-phenylalanyl]-L-
    phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI)
    (CA INDEX NAME)
NTE modified (modifications unspecified)
______
             ----- location -----
                                        description
modification Phe-1
                                    bromoacetyl<Bac>
SQL 7
    154887-74-8 REGISTRY
RN
SQL 7
SEQ
       1 FFWKTFC
         ======
HITS AT:
         1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
          1: 120:293143
    ANSWER 33 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
    154887-73-7 REGISTRY
RN
    L-Cysteinamide, N-(chloroacetyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N-[2-[(5-aminopentyl)(2-
```

mercapto-2-methylpropyl)amino]ethyl]-N-(2-mercapto-2-methylpropyl)- (9CI)

```
(CA INDEX NAME)
NTE modified (modifications unspecified)
 ______
              ----- location -----
modification Phe-1
                                 undetermined modification
SQL 7
RN
    154887-73-7 REGISTRY
   7
SQL
       1 FFWKTFC
SEO
HITS AT:
         1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 120:293143
L58 ANSWER 34 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    154887-72-6 REGISTRY
    L-Cysteine, N-[N-[N-[N-[N-[N-[N-(chloroacetyl)-L-phenylalanyl]-L-tyrosyl]-
    D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
-----
             ----- location -----
                                     description
modification Phe-1
                                 undetermined modification
RN
    154887-72-6 REGISTRY
SQL 7
SEQ
       1 FYWKTFC
HITS AT:
        1 - 7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 120:293143
   ANSWER 35 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
RN
    154887-71-5 REGISTRY
   CN
    phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-5-
   mercapto- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
            ----- location -----
         Nva-7
Trp-3
uncommon
                            D
stereo
______
SQL 7
RN
   154887-71-5 REGISTRY
SQL 7
      1 FFWKTFX
SEQ
        ======
HITS AT:
```

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

```
REFERENCE 1: 120:293143
L58 ANSWER 36 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    154887-67-9 REGISTRY
RN
CN
    L-Homocysteine, N-[N-[N-[N-[N-[N-(chloroacetyl)-L-phenylalanyl]-L-
    phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI)
    (CA INDEX NAME)
NTE modified (modifications unspecified)
         ----- location ----- description
         uncommon Hcy-7 - modification Phe-1 -
                                    undetermined modification
   154887-67-9 REGISTRY
SQL 7
   1 FFWKTFX
SEQ
         ======
HITS AT:
        1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 120:293143
L58 ANSWER 37 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    154887-60-2 REGISTRY
    L-Cysteinamide, N-(chloroacetyl)-L-phenylalanyl-L-phenylalanyl-D-
    tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
NTE modified
----- location -----
                                         description
terminal mod. Cys-7 modification Phe-1
                                C-terminal amide undetermined modification
SQL 7
RN
    154887-60-2 REGISTRY
SQL 7
       1 FFWKTFC
SEO
         ======
HITS AT:
         1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 120:293143
L58 ANSWER 38 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    154887-59-9 REGISTRY
RN
CN
    L-Cysteine, N-[N-[N-[N-[N-(Chloroacetyl)-L-phenylalanyl]-L-
    phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]- (9CI)
    (CA INDEX NAME)
NTE modified (modifications unspecified)
             ----- location ----- description
modification Phe-1 -
                                    undetermined modification
SOL 7
RN 154887-59-9 REGISTRY
SQL 7
```

```
SEO
                            1 FFWKTFC
                                    ======
                                  1-7
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 120:293143
L58 ANSWER 39 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
                81797-01-5 REGISTRY
RN
                 L-Phenylalanine, \ N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phe
CN
                tryptophyl-N6-(1-iminoethyl)-L-lysyl-L-threonyl-, cyclic
                 (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
NTE cyclic
               modified (modifications unspecified)
                                                   ----- location -----
                                    uncommon Oaa-4 -
modification Lys-1 -
                                                                                                                        1-iminoethyl
                                    ______
SQL 7
RN 81797-01-5 REGISTRY
SQL 7
                        1 KTFXFFW
SEQ
                                  ======
                             1-4, 5-7
HITS AT:
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                                  1: 96:193607
REFERENCE
L58 ANSWER 40 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
                81726-62-7 REGISTRY
RN
                L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phenylalanyl-5-phen
CN
                methyltryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
                 (CA INDEX NAME)
OTHER CA INDEX NAMES:
               1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
CN
                L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-
CN
                methyl-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
NTE cyclic
                modified (modifications unspecified)
    _____
                                                    ----- location -----
                                                                                                                                                      description
 --
                                                   Oaa-4
uncommon Oaa-4 modification Trp-7
 uncommon
                                                                                                                                       methyl<Me>
 SQL 7
 RN 81726-62-7 REGISTRY
 SQL 7
 SEQ
                              1 KTFXFFW
 HITS AT: 1-4, 5-7
```

RELATED SEQUENCES AVAILABLE WITH SEQLINK

Page 32

```
REFERENCE
         1: 96:193607
    ANSWER 41 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
T.58
RN
    81726-61-6 REGISTRY
CN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-1-
    methyltryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
    (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN
    1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-1-
CN
    methyl-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
NTE
   cyclic
    modified (modifications unspecified)
type ----- location ----- description
_____
uncommon . Oaa-4
                           _
modification Trp-7
                     -
                                methyl<Me>
RN 81726-61-6 REGISTRY
SQL 7
       1 KTFXFFW
SEQ
         ======
HITS AT: 1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
         1: 96:193607
REFERENCE
    ANSWER 42 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
RN
    81710-94-3 REGISTRY
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-L-lysyl-L-valyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX
    NAME)
OTHER CA INDEX NAMES:
   1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
NTE cyclic
             ----- location -----
type
                                        description
_____
            Oaa-4
uncommon
SQL 7
    81710-94-3 REGISTRY
RN
SQL 7
SEQ
       1 KVFXFFW
         ======
        1-4, 5-7
HITS AT:
REFERENCE
         1: 97:39343
REFERENCE
          2: 96:193607
    ANSWER 43 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
    81710-92-1 REGISTRY
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-L-lysyl-L-seryl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX
    NAME)
OTHER CA INDEX NAMES:
```

1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.

```
NTE cyclic
type ----- location -----
                                      description
uncommon Oaa-4
SQL 7
   81710-92-1 REGISTRY .
RN
SQL 7
SEQ
       1 KSFXFFW
        ======
        1-4, 5-7
HITS AT:
REFERENCE 1: 97:39343
REFERENCE 2: 96:193607
L58 ANSWER 44 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    81710-89-6 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-N6,N6-dimethyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
         (CA INDEX NAME)
OTHER CA INDEX NAMES:
   1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
CN
NTE cyclic
   modified (modifications unspecified)
  ______
      ----- location -----
                                     description
  ______
uncommon Oaa-4
modification Lys-1
                              methyl<2; Me>
______
   81710-89-6 REGISTRY
SQL 7
      1 KTFXFFW
        ======
HITS AT: 1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 96:193607
L58 ANSWER 45 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    81710-88-5 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-N6-methyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
    (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
   1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
CN
NTE cyclic
   modified (modifications unspecified)
-----
             ----- location -----
                                     description
uncommon Oaa-4 modification Lys-1
                                 methyl<Me>
SQL 7
RN 81710-88-5 REGISTRY
SQL 7
```

```
SEQ
                     1 KTFXFFW
   HITS AT:
                         1-4, 5-7
   **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
   REFERENCE 1: 96:193607
          ANSWER 46 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
  L58
             81710-83-0 REGISTRY
             L-Phenylalanine, \ N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenyl-1-phenylalanyl-1-phenyl-1-phenylalanyl-1-phenylalanyl-1-phenylalanyl-1-phenyl
  CN
            bromotryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
             (CA INDEX NAME)
  OTHER CA INDEX NAMES:
            1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
            L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-
            bromo-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
  NTE
           cyclic
            modified (modifications unspecified)
                                 ----- location ----- description
  uncommon Oaa-4 - modification Trp-7 -
                                                                                         bromo<Br>
  ------
  SQL 7
  RN
            81710-83-0 REGISTRY
  SQL
          7
 SEQ
                    1 KTFXFFW
                        ======
 HITS AT:
                        1-4, 5-7
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
 REFERENCE
                         1: 96:193607
         ANSWER 47 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
 1.58
 RN
           81710-82-9 REGISTRY
 CN
          L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-6-
           fluorotryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
            (CA INDEX NAME)
OTHER CA INDEX NAMES:
          1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
CN
          L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-6-
CN
          fluoro-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
NTE
         cyclic
          modified (modifications unspecified)
......
  type ----- location ----- description
uncommon Oaa-4 modification Trp-7
                                                                                      fluoro<F>
SQL 7
          81710-82-9 REGISTRY
SQL 7
SEQ
                  1 KTFXFFW
                     ======
HITS AT: 1-4, 5-7
```

RELATED SEQUENCES AVAILABLE WITH SEOLINK

```
REFERENCE
         1: 96:193607
L58 ANSWER 48 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     81710-81-8 REGISTRY
CN
     L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-
     fluorotryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
    1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
CN
     L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-5-
CN
    fluoro-DL-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
NTE cyclic
    modified (modifications unspecified)
    ______
 type ----- location ----- description
_____
uncommon Oaa-4 modification Trp-7
                                  fluoro<F>
RN 81710-81-8 REGISTRY
SQL 7
SEQ
        1 KTFXFFW
HITS AT:
        1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 96:193607
L58 ANSWER 49 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    81710-75-0 REGISTRY
CN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-amino-L-
    phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
     (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
   1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
CN
NTE cyclic
    modified (modifications unspecified)
               ----- location -----
                                         description
uncommon Oaa-4 -
modification Phe-6 -
                                      amino<NH2>
SQL 7
    81710-75-0 REGISTRY
RN
SQL 7
        1 KTFXFFW
SEQ
          ======
          1-4, 5-7
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
         1: 123:1202
REFERENCE
         2: 97:39343
REFERENCE
         3: 96:193607
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ANSWER 50 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
L58
    81710-74-9 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-nitro-L-
CN
    phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
    (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
   1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
NTE cyclic
    modified (modifications unspecified)
              ----- location ----- description
_____
uncommon Oaa-4 modification Phe-6
                               nitro<N>
             Phe-6
_____
SQL 7
RN 81710-74-9 REGISTRY
SQL 7
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HITS AT:
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REFERENCE
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REFERENCE 2: 97:39343
REFERENCE 3: 96:193607
L58 ANSWER 51 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    81710-73-8 REGISTRY
RN
    Cyclo(7-aminoheptanoyl-L-phenylalanyl-4-chloro-L-phenylalanyl-D-tryptophyl-
CN
    L-lysyl-L-threonyl-L-phenylalanyl) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
CN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-chloro-L-
CN
    phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
OTHER NAMES:
CN L 362862
NTE cyclic
    modified (modifications unspecified)
______
              ----- location ----- description
uncommon Oaa-4 modification Phe-6
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SQL 7
    81710-73-8 REGISTRY
RN
SQL 7
    1 KTFXFFW
SEQ
         1-4, 5-7
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         1: 123:1202
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         2: 119:262666
REFERENCE
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REFERENCE
           3: 119:174313
 REFERENCE
           4: 97:39343
 REFERENCE
           5: 96:193607
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    ANSWER 52 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
 RN
     81710-72-7 REGISTRY
 CN
     L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-
     fluorophenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic
     (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
     1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
     L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-4-fluoro-DL-
     phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide
 NTE
     modified (modifications unspecified)
 ______
 type ----- location ----- description
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uncommon Oaa-4 -
modification Phe-6 -
                                     fluoro<F>
SOL 7
    81710-72-7 REGISTRY
RN
SQL
SEQ
        1 KTFXFFW
HITS AT:
         1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
         1: 96:193607
L58 ANSWER 53 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    81710-70-5 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-tyrosyl-D-
CN
    tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA
    INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
NTE cyclic
______
         ----- location -----
                                      description
-
uncommon Oaa-4
SQL 7
    81710-70-5 REGISTRY
RN
SQL
SEQ
       1 KTFXFYW
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HITS AT:
         1-4, 5-7
REFERENCE
         1: 123:1202
REFERENCE
         2: 97:39343
REFERENCE
         3:
             96:193607
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ANSWER 54 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
   RN
             72983-06-3 REGISTRY
  CN
             L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-L-
              tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA
             INDEX NAME)
  OTHER CA INDEX NAMES:
  CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
  NTE cyclic
                                     ----- location ----- description
  uncommon Oaa-4
  RN
           72983-06-3 REGISTRY
  SOL 7
 SEO
                     1 KTFXFFW
 HITS AT: 1-4, 5-7
  **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
 REFERENCE
                        1: 96:193607
 REFERENCE
                           2: 92:104734
 L58 ANSWER 55 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
 RN
            70717-67-8 REGISTRY
            L-Phenylalanine, \ \ N-(7-amino-7-carboxy-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenylalanyl-L-phenyl-
            phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-
           peptide, (R) - (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN
           1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
 NTE
                                  ----- location ----- description
 ______
bridge Phe-1 - Asu-7 lactam uncommon Asu-7 - - D
                                                      ASU-
-
 ______
 SQL 7
           70717-67-8 REGISTRY
 SQL
SEQ
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HITS AT:
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
                          1: 108:32093
REFERENCE
                          2: 105:54728
REFERENCE
                         3: 91:57549
L58 ANSWER 56 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
RN
           70717-66-7 REGISTRY
           L-Phenylalanine, N-(7-amino-7-carboxy-1-oxoheptyl)-L-phenylalanyl-L-
CN
          phenylalanyl-D-tryptophyl-N6-[[(2-chlorophenyl)methoxy]carbonyl]-L-lysyl-O-
           (phenylmethyl)-L-threonyl-, cyclic (6.fwdarw.1)-peptide, (R)- (9CI) (CA
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INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
NTE modified (modifications unspecified)
______
       ----- location ----- description
type
bridge Phe-1 - Asu-7 lactam
uncommon Asu-7 - - stereo Trp-3 - D
        ______
SOL 7
    70717-66-7 REGISTRY
RN
SOL 7
SEQ 1 FFWKTFX
         --====
HITS AT: 1-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 91:57549
L58 ANSWER 57 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    70717-64-5 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-N6-[[(2-chlorophenyl)methoxy]carbonyl]-L-lysyl-L-threonyl-,
    cyclic (6.fwdarw.1)-peptide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
NTE cyclic
   modified (modifications unspecified)
             ----- location ----- description
_____
uncommon Oaa-4 -
modification Lys-1 -
                             [(2-chlorophenyl)methoxy]
                                  carbonyl<2CZ>
RN 70717-64-5 REGISTRY
SQL 7
       1 KTFXFFW
SEO
         ======
HITS AT: 1-4, 5-7
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 91:57549
L58 ANSWER 58 OF 58 REGISTRY COPYRIGHT 2003 ACS on STN
    70512-60-6 REGISTRY
RN
    L-Phenylalanine, N-(7-amino-1-oxoheptyl)-L-phenylalanyl-L-phenylalanyl-D-
CN
    tryptophyl-L-lysyl-L-threonyl-, cyclic (6.fwdarw.1)-peptide (9CI) (CA
    INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,4,7,10,13,16,19-Heptaazacyclohexacosane, cyclic peptide deriv.
NTE cyclic
             ----- location -----
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0aa-4

uncommon

SQL 7 RN 70512-60-6 REGISTRY SQL 7

SEQ 1 KTFXFFW ====== HITS AT: 1-4, 5-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 123:1202

REFERENCE 2: 99:16912

REFERENCE 3: 97:50069

REFERENCE 4: 97:39343

REFERENCE 5: 96:193607

REFERENCE 6: 94:114892

REFERENCE 7: 92:104734

REFERENCE 8: 91:57549

REFERENCE 9: 91:21128

=> d stat que 164 L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO? L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO? L59 349 SEA FILE=REGISTRY ABB=ON PLU=ON FY.KVG./SQSP L63 86 SEA FILE=HCAPLUS ABB=ON PLU=ON L59 L64 0 SEA FILE=HCAPLUS ABB=ON PLU=ON L63 AND L24 => fil hcaplus FILE 'HCAPLUS' ENTERED AT 11:42:08 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d stat que 173

L68

16 SEA FILE=REGISTRY ABB=ON PLU=ON C[FY].WK.[FA][GVF]/SQSP

L69

2 SEA FILE=REGISTRY ABB=ON PLU=ON CFWWKTFG/SQSP

L70

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L71

14 SEA FILE=REGISTRY ABB=ON PLU=ON L68 NOT L69

L72

7 SEA FILE=HCAPLUS ABB=ON PLU=ON L71

L73

7 SEA FILE=HCAPLUS ABB=ON PLU=ON L72 NOT L70

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L73 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:521944 HCAPLUS

DOCUMENT NUMBER: 139:47966

TITLE: The complete genome sequence of the carcinogenic

bacterium Helicobacter hepaticus

AUTHOR(S): Suerbaum, Sebastian; Josenhans, Christine;

Sterzenbach, Torsten; Drescher, Bernd; Brandt, Petra; Bell, Monica; Droege, Marcus; Fartmann, Berthold; Fischer, Hans-Peter; Ge, Zhongming; Hoerster, Andrea; Holland, Rudi; Klein, Kerstin; Koenig, Jochen; Macko, Ludwig; Mendz, George L.; Nyakatura, Gerald; Schauer,

David B.; Shen, Zeli; Weber, Jacqueline; Frosch,

Matthias; Fox, James G.

CORPORATE SOURCE: Institute of Hygiene and Microbiology, University of

Wuerzburg, Wuerzburg, D-97080, Germany

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America (2003), 100(13), 7901-7906

CODEN: PNASA6; ISSN: 0027-8424

PUBLISHER: National Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

AB Helicobacter hepaticus causes chronic hepatitis and liver cancer in mice.

It is the prototype enterohepatic Helicobacter species and a close relative of Helicobacter pylori, also a recognized carcinogen. This report describes the complete genome sequence of H. hepaticus ATCC51449. H. hepaticus has a circular chromosome of 1,799,146 base pairs, predicted to encode 1875 proteins. A total of 938, 953, and 821 proteins have orthologs in H. pylori, Campylobacter jejuni, and both pathogens, resp. H. hepaticus lacks orthologs of most known H. pylori virulence factors, including adhesins, the VacA cytotoxin, and almost all cag pathogenicity island proteins, but has orthologs of the C. jejuni adhesin PEB1 and the cytolethal distending toxin (CDT). The genome contains a 71-kb genomic island (HHGI1) and several genomic islets whose G+C content differs from the rest of the genome. HHGI1 encodes three basic components of a type IV secretion system and other virulence protein homologs, suggesting a role of HHGIl in pathogenicity. The genomic variability of H. hepaticus was assessed by comparing the genomes of 12 H. hepaticus strains with the sequenced genome by microarray hybridization. Although five strains, including all those known to have caused liver disease, were indistinguishable from ATCC51449, other strains lacked between 85 and 229 genes, including large parts of HHGI1, demonstrating extensive variation of genome content within the species.

548408-50-0, GenBank AAP77331 IT

> RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; complete genome sequence of the carcinogenic bacterium Helicobacter hepaticus)

REFERENCE COUNT:

41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:381903 HCAPLUS

DOCUMENT NUMBER: 138:332703

TITLE: Complete genome sequence and comparative analysis of the industrial microorganism Streptomyces avermitilis

AUTHOR(S): Ikeda, Haruo; Ishikawa, Jun; Hanamoto, Akiharu;

Shinose, Mayumi; Kikuchi, Hisashi; Shiba, Tadayoshi; Sakaki, Yoshiyuki; Hattori, Masahira; Omura, Satoshi

CORPORATE SOURCE: Kitasato Institute for Life Sciences, Kitasato

University, Kanagawa, 228-8555, Japan

SOURCE: Nature Biotechnology (2003), 21(5), 526-531

CODEN: NABIF9; ISSN: 1087-0156

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal LANGUAGE: English

Species of the genus Streptomyces are of major pharmaceutical interest because they synthesize a variety of bioactive secondary metabolites. complete nucleotide sequence of the linear chromosome of Streptomyces avermitilis was detd. S. avermitilis produces avermectins, a group of antiparasitic agents used in human and veterinary medicine. The genome contains 9,025,608 bases (av. GC content, 70.7%) and encodes at least 7574 potential open reading frames (ORFs). Thirty-five percent of the ORFs (2664) constitute 721 paralogous families. Thirty gene clusters related to secondary metabolite biosynthesis were identified, corresponding to 6.6% of the genome. Comparison with Streptomyces coelicolor A3(2) revealed that an internal 6.5-Mb region in the S. avermitilis genome was highly conserved with respect to gene order and content, and contained all known essential genes but showed perfectly asym. structure at the oriC center. In contrast, the terminal regions were not conserved and preferentially contained nonessential genes. The genome and plasmid sequences are deposited in GenBank/EMBL/DDBJ under accession nos. BA000030 and AP005645, resp., and in the RefSeq database under NC 003155 and NC 004719, resp. [This abstr. record is one of two records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT 508725-82-4

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; complete genome sequence and comparative anal. of the industrial microorganism Streptomyces avermitilis)

L73 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:565222 HCAPLUS

DOCUMENT NUMBER: 135:163406

TITLE: Human nucleic acids and their encoded proteins and.

antibodies

INVENTOR(S): Rosen, Craig A.; Barash, Steven C.; Ruben, Steven M.

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA

SOURCE: PCT Int. Appl., 673 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 90

PATENT INFORMATION:

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US	2002164685	A1	20021107		US	200	01-7	6485	7	2001	0117		
US		A1	20021121		US	200	01-7	64904		2001			
US	2003044890	A1	20030306		US			64876		2001	0117		
AU	2001052878	A5	20030306 20010807 20010814		ΑU	200	01-5	2878 3137		2001			
AU	2001043137	A5	20010814		ΑÜ	J 200	01-4	3137		2001	0205		

AU 2001041411 US 2003013649 US 2003054420 US 2003044905 US 2003077703 US 2003077704 US 2003092102 US 2003096346 US 2003039993 US 2003044907 US 2003054373 US 2003054375 US 2003054375 US 2003054375 US 2003054377 US 2003082681 US 2003054377 US 2003082758 US 2003054379 US 2003059875 PRIORITY APPLN. INFO.:	A5 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1 A1	20010820 20030116 20030320 20030306 20030424 20030424 20030515 20030522 20030227 20030320 20030320 20030327 20030410 20030424 20030501 20030320 200305501 20030327	AU 2001-41411 US 2001-989442 US 2002-72349 US 2002-73865 US 2002-73979 US 2002-73912 US 2002-73961 US 2002-74095 US 2002-74045 US 2002-74045 US 2002-73885 US 2002-79900 US 2002-80110 US 2002-91526 US 2002-91526 US 2002-91572 US 2002-91574 US 2002-91574 US 2002-91504 US 2002-91458 US 2002-91448 US 2002-91448 US 2002-91459 US 2002-102627 US 2002-116016 US 2002-115928 US 2002-125540 US 2000-180628P US 2000-184664P US 2000-184664P PUS 2000-184664P PUS 2000-184664P PUS 2000-184664P PUS 2000-198123P PUS 2000-198123P PUS 2000-209467P PUS 2000-215135P PUS 2000-216647P PUS 2000-217487P PUS 2000-217496P PUS 2000-225266P PUS 2000-225213P PUS 2000-225213P PUS 2000-225213P PUS 2000-225213P PUS 2000-225266P PUS 2000-225266P PUS 2000-225275P PUS 2000-225275P PUS 2000-225275P PUS 2000-225757P PUS 2000-225758P PUS 2000-225758P PUS 2000-225759P PUS 2000-225759P PUS 2000-225759P PUS 2000-225779P	20010208 20011121 20020214 20020214 20020214 20020214 20020214 20020214 20020214 20020222 20020222 20020222 20020307 20020307 20020307 20020307 20020307 20020307 20020307 20020307 20020307 20020307 20020307 20020307 20020307 2002031 20020
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                  B1 20010117
US 2001-764854
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US 2001-764855
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                 A1 20010117
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                 B1 20010117
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                 A1 20010117
US 2001-764863
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US 2001-764870
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US 2001-764887
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US 2001-764889
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                 B1 20010117
US 2001-764900
                 B1 20010117
US 2001-764903
                 A1 20010117
WO 2001-US1322
                 W 20010117
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AB The present invention relates to novel connective tissue-related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "connective tissue antigens", and the use of such kidney antigens for detecting disorders of the connective tissues, particularly the presence of connective tissue cancer and cancer metastases. More specifically, 1193 isolated connective tissue-assocd. cDNA mols. are provided encoding novel connective tissue-assocd. polypeptides. Novel connective tissue polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human connective tissue assocd. polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the kidney, including kidney cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compns. for inhibiting the prodn. and function of the polypeptides of the present invention. The Sequence Listing was provided as an electronic file, but was not made available in the release of this patent.

IT 353542-70-8, Protein (human clone HWHQB79)

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; human connective tissue-specific nucleic acids and their encoded proteins and antibodies)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L73 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:535323 HCAPLUS

DOCUMENT NUMBER: 103:135323

TITLE: New analogs of somatostatin with unexpected effects in

vivo on insulin basal secretion in the rat (1)

AUTHOR(S):

Diaz, Joseph; Cazaubon, Catherine; Demarne, Henri;

Gagnol, Jean Pierre; Guegan, Remy; Muneaux, Yvette; Perreaut, Pierre; Richaud, Jean Paul; Vedel, Michel;

Roncucci, Romeo

CORPORATE SOURCE: Cent. Rech., Clin-Midy/Sanofi, Montpellier, 34082, Fr.

SOURCE: European Journal of Medicinal Chemistry (1985), 20(3),

219-27 CODEN: EJMCA5; ISSN: 0223-5234

DOCUMENT TYPE: Journal LANGUAGE: English

Twenty analogs of somatostatin were synthesized by the alternating soln./solid-phase procedure. The peptide analogs contg. taurine aza-alanine or D-amino acids as well as multiple deletions were examd. for the selective inhibition of insulin [9004-10-8] or glucagon [9007-92-5] release. The biol. activities were evaluated in vivo in the rat by measuring the effects of the modified somatostatin mols. on basal secretion of insulin and glucagon in the portal vein. Although some selective analogs were found, a few of them having a taurine or an aza-alanine residue in their structure caused an increase of insulin secretion. This unexpected phenomenon is unexplained and under investigation.

IT 89343-47-5P 89343-54-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and glucagon and insulin secretion response to, mol. structure in relation to)

L73 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1985:215394 HCAPLUS

DOCUMENT NUMBER: 102:215394

TITLE: Somatostatin analogs: correlation of receptor

affinity with inhibition of cyclic AMP formation in

pancreatic acinar cells

AUTHOR(S): Taparel, D.; Susini, C.; Esteve, J. P.; Diaz, J.;

Cazaubon, C.; Vaysse, N.; Ribet, A.

CORPORATE SOURCE: INSERM, Toulouse, 31054, Fr.

SOURCE: Peptides (New York, NY, United States) (1985), 6(1),

109-14

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

H-Cys-AzaAla-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-Cys-OH

AB Cyclic somatostatin [38916-34-6] inhibited secretin [1393-25-5]stimulated cAMP [60-92-4] formation in pancreatic acinar cells. The
inhibition was only partial. Maximal inhibition reached apprx.50%.
Somatostatin analogs tested inhibited secretin-stimulated cAMP formation
with a lower potency than somatostatin. I [89343-24-8] was an antagonist
of somatostatin in inhibiting secretin-stimulated cAMP. Analogs inhibited
the binding of 125I-labeled [Tyr11]somatostatin to pancreatic acini.
There was a good correlation between concn. for inhibiting
secretin-stimulated cAMP by 50% and receptor binding affinities.

IT 89343-47-5

RL: BIOL (Biological study)
(cAMP formation inhibition by and receptor binding of, in pancreas, mol. structure in relation to)

L73 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:139624 HCAPLUS

DOCUMENT NUMBER: 100:139624

TITLE: Somatostatin analogs with modified biological activity

and medicaments containing them

INVENTOR(S): Diaz, Joseph; Muneaux, Yvette; Roncucci, Romeo

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 24 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE KIND DATE PATENT NO. _____ ______ FR 1982-3852 FR 2523125 A1 19830916 19820308 19820308 PRIORITY APPLN. INFO.: FR 1982-3852

CASREACT 100:139624 OTHER SOURCE(S):

For diagram(s), see printed CA Issue.

Somatostatin analogs I (R = H or an amino acid or dipeptide residue; X = AΒ D- or L-Cys; X1 = Phe, D-Ala, null; X2 = L- or D-Phe or Gly; X3 = L- or D-Phe, null) and their salts were prepd. Thus, Boc-Cys(Acm)-D-Phe-Phe-D-Trp-Lys(Msc)-Thr-Phe-Phe-D-Cys(Acm)-OPse (Boc = Me3CO2C, Acm = AcNHCH2, Msc = MeSO2CH2CH2O2C, Pse = p-PhN:NC6H4CH2SO2CH2CH2) was prepd. by stepwise coupling in soln. and then it was Boc-deblocked by acidolysis and then Msc- and Pse-deblocked by base to give H-Cys(Acm)-D-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-D-Cys(Acm)-OH). The latter was Acm-deblocked by AgNO3 and then cyclized by oxidn. with K3[Fe(CN)6] to give somatostatin analog II. The insulin-, glucagon-, and growth hormone-inhibiting activities of four I were compared with those of somatostatin.

89343-60-2P 89343-61-3P ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and deblocking of)

89306-55-8P ΤT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and oxidative cyclization of)

89343-58-8P ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and partial deblocking of)

89343-47-5P 89343-54-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of)

L73 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

1984:103905 HCAPLUS ACCESSION NUMBER:

100:103905 DOCUMENT NUMBER:

Somatostatin analogs having a hydrazide-type bond and TITLE:

medicaments containing them

Perreaut, Pierre; Cazaubon, Catherine; Gagnol, Jean INVENTOR(S):

Pierre

Sanofi, Fr. PATENT ASSIGNEE(S):

Fr. Demande, 12 pp. SOURCE:

CODEN: FRXXBL

DOCUMENT TYPE: Patent French LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE _____ FR 1982-3777 19820305 FR 2522655 19830909 A1 B1 19870306 FR 2522655 19820305 FR 1982-3777 PRIORITY APPLN. INFO.:

For diagram(s), see printed CA Issue. GΙ

Somatostatin hydrazide analogs I (X, X1 = A and NHA, where A = an AΒ .alpha.-amino acid residue, preferably Phe) were prepd. Thus, I (X = Phe, X1 = NH-Phe) (II) was prepd. by the solid-phase method. II inhibited the secretion of growth hormone and glucagon, but not the secretion of insulin and gastric acid, of insulin and gastric acid.

88971-24-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and partial deblocking of) TT **88985-61-9DP**, resin bound RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and resin-cleavage of) => => => fil reg FILE 'REGISTRY' ENTERED AT 11:42:39 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS) Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem. 21 JUL 2003 HIGHEST RN 552272-14-7 STRUCTURE FILE UPDATES: DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003 Please note that search-term pricing does apply when conducting SmartSELECT searches. Crossover limits have been increased. See HELP CROSSOVER for details. Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf => => d .seq 171 1-14L71 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN 548408-50-0 REGISTRY RN INDEX NAME NOT YET ASSIGNED CN 1815 SQL 1 MRYLCYIWKF FVFFGFIYVS TFLTACSDNK FVESYTONIS TTPEILITFN SEQ ========= HITS AT: 5-12 REFERENCE 1: 139:47966 L71 ANSWER 2 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN 508725-82-4 REGISTRY RN Glycosyl transferase (Streptomyces avermitilis strain MA-4680) (9CI) CN INDEX NAME) OTHER NAMES: GenBank BAC74646 GenBank BAC74646 (Translated from: GenBank AP005048) SOL 351 ADAVASLLER PEYERRQTAR ARAECFGWKT AVDAFLAAHD AGAPAPAREG SEO

REFERENCE 1: 138:332703

HITS AT:

375-382

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ANSWER 3 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
L71
    486784-61-6 REGISTRY
RN
    GenBank CAA88678 (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
  GenBank CAA88678 (Translated from: GenBank Z48758)
CN
SQL
       1 MLLIKRYLMD PESLRRQIMN VYKCYMWKRA FHSNRSLLEV KRREKSLQRK
SEQ
HITS AT:
L71 ANSWER 4 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    353542-70-8 REGISTRY
   Protein (human clone HWHQB79) (9CI) (CA INDEX NAME)
OTHER NAMES:
    714: PN: WO0155343 SEQID: 714 claimed protein
NTE
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             ----- location ----- description
uncommon Aaa-10 -
uncommon Aaa-15
uncommon Aaa-16
uncommon Aaa-112
SOL 120
      51 QKPNMSKQEK GNILWLTMVW LSLACLQRKN YNDCMLNTVI TDCYHWKNFG
SEO
         93-100
HITS AT:
REFERENCE 1: 135:163406
L71 ANSWER 5 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    89343-61-3 REGISTRY
RN
    CN
    [(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-phenylalanyl]-D-
    tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-phenylalanyl]- (9CI)
    (CA INDEX NAME)
NTE modified (modifications unspecified)
-----
     ----- location ----- description
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modification Cys-1 - (acetylamino)methyl<Acm> modification Cys-9 - (acetylamino)methyl<Acm>
SQL 9
        1 CFFWKTFFC
SEO
         =======
         1-8
HITS AT:
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
 REFERENCE
          1: 100:139624
 L71 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
     89343-60-2 REGISTRY
 RN
     [(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-phenylalanyl]-D-
     tryptophyl]-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl]-L-threonyl]-L-
     phenylalanyl]-L-phenylalanyl]-, 2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]e
```

```
thyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
   [N2-[N-[N-[N-[S-[(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-
    phenylalanyl]-D-tryptophyl]-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-
    lysyl]-L-threonyl]-L-phenylalanyl]-L-phenylalanyl]-D-cysteine
    2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]ethyl ester (1:1)
NTE modified (modifications unspecified)
------
             ----- location ----- description
modification - - modification Cys-1 - modification Lys-5 -
                                   undetermined modification
                               (acetylamino)methyl<Acm>
[2-(methylsulfonyl)
modification Cys-9 - ethoxy]carbonyl<Msc> (acetylamino)methyl<Acm>
SQL 9
SEQ
      1 CFFWKTFFC
         ======
HITS AT: 1-8
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
    89343-60-2 REGISTRY
       1 CFFWKTFFC
SEQ
         =======
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1 CFFWKTFFC
SEO
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE 1: 100:139624
L71 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    RN
    [(acetylamino)methyl]-L-cysteinyl]-D-phenylalanyl]-L-phenylalanyl]-D-
    tryptophyl]-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl]-L-threonyl]-L-
    phenylalanyl]-L-phenylalanyl]-, 2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]e
    thyl ester (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
      ----- location ----- description
 ______
                     modification Cys-1 - modification Lys-5 -
modification Cys-9
SQL 9
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HITS AT: 1-8

SEQ 1 CFFWKTFFC

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

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L71 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    RN
CN
    [(acetylamino)methyl]-N-[(1,1-dimethylethoxy)carbonyl]-L-cysteinyl]-D-
    phenylalanyl]-L-phenylalanyl]-D-tryptophyl]-N6-[[2-
    (methylsulfonyl)ethoxy]carbonyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-
    phenylalanyl]-, 2-[[[4-(phenylazo)phenyl]methyl]sulfonyl]ethyl ester (9CI)
    (CA INDEX NAME)
NTE modified (modifications unspecified)
______
 type ----- location ----- description
 -----
modification Cys-1 -
modification Cys-1 -
modification Lys-5 -
                                  (acetylamino)methyl<Acm>
                                  (1,1-dimethylethoxy) carbonyl<Boc>
[2-(methylsulfonyl)
                           ethoxy]carbonyl<Msc>
- (acetylamino)methyl<Acm>
modification Cys-9
SQL 9
        1 CFFWKTFFC
SEO
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HITS AT:
         1 - 8
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
         1: 100:139624
REFERENCE
L71 ANSWER 9 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    89343-54-4 REGISTRY
D-Cysteine, L-cysteinyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-
RN
CN
    L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic (1.fwdarw.9)-disulfide
          (CA INDEX NAME)
OTHER CA INDEX NAMES:
    1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic peptide
NTE
-------
              ----- location ----- description
 _.
------
bridge Cys-1 - Cys-9 disulfide bridge
SQL 9
        1 CFFWKTFFC
          _____
          1-8
 HITS AT:
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
          1: 103:135323
 REFERENCE
 REFERENCE
           2: 100:139624
 L71 ANSWER 10 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
     89343-47-5 REGISTRY
 RN
     D-Cysteine, L-cysteinyl-D-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-
 CN
     L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic (1.fwdarw.9)-disulfide
     (9CI) (CA. INDEX NAME)
 OTHER CA INDEX NAMES:
     1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic peptide
     deriv.
```

```
NTE
                 -----
           ----- location ----- description
_.
-----
bridge Cys-1 - Cys-9 disulfide bridge
._____
SQL 9
      1 CFFWKTFFC
SEQ
        =======
HITS AT:
        1-8
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1: 103:135323
REFERENCE
       2: 102:215394
REFERENCE
REFERENCE
       3: 100:139624
L71 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    89306-55-8 REGISTRY
RN
    L-phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-
CN
    phenylalanyl]-D-cysteinato(3-)]]di-, hydrogen (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    phenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-phenylalanyl]-L-
    phenylalanyl]-, silver complex
NTE metal complex
                ------
      ----- location ----- description
 type
            Phe-2 -
                                D
stereo
                           D
D
stereo Trp-4
stereo Cys-9
SQL 9
       1 CFFWKTFFC
HITS AT: 1-8
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
         1: 100:139624
 REFERENCE
L71 ANSWER 12 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    88985-61-9 REGISTRY
 RN
    L-Cysteine, S-[(acetylamino)methyl]-N-[(1,1-dimethylethoxy)carbonyl]-L-
    cysteinyl-L-phenylalanyl-L-hydrazinophenylalanyl-D-tryptophyl-N6-[[2-
    (methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-
    phenylalanyl-S-[(acetylamino)methyl]- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
    L-Cysteine, S-[(acetylamino)methyl]-N-[(1,1-dimethylethoxy)carbonyl]-L-
    cysteinyl-L-phenylalanyl-L-2-(phenylmethyl)-3-aza-.beta.-alanyl-D-
    tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-
    phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]-
 NTE modified (modifications unspecified)
 ----- location ----- description
 0aa-3
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uncommon

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Trp-4
stereo
_____
SQL 9
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SEO
         =======
HITS AT:
         1-8
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
         1: 100:103905
REFERENCE
    ANSWER 13 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
    88971-24-8 REGISTRY
RN
    L-Cysteine, S-[(acetylamino)methyl]-L-cysteinyl-L-phenylalanyl-L-
CN
    hydrazinophenylalanyl-D-tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-
    L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]-,
    methyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Acetic acid, trifluoro-, compd. with S-[(acetylamino)methyl]-L-cysteinyl-L-
    phenylalanyl-L-2-(phenylmethyl)-3-aza-.beta.-alanyl-D-tryptophyl-N6-[[2-
    (methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-
    phenylalanyl-S-[(acetylamino)methyl]-L-cysteine methyl ester (1:1)
    L-Cysteine, S-[(acetylamino)methyl]-L-cysteinyl-L-phenylalanyl-L-2-
CN
    (phenylmethyl)-3-aza-.beta.-alanyl-D-tryptophyl-N6-[[2-
    (methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-L-
    phenylalanyl-S-[(acetylamino)methyl]-, methyl ester,
    mono(trifluoroacetate) (salt)
NTE modified (modifications unspecified)
----- location ----- description
uncommon Oaa-3 - - D
stereo
SQL 9
        1 CFXWKTFFC
SEO
          =======
        1-8
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
    88971-24-8 REGISTRY
RN
        1 CFXWKTFFC
SEO
          =======
         1-8
HITS AT:
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1 CFXWKTFFC
          ======
 HITS AT:
          1-8
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
           1: 100:103905
 REFERENCE
 L71 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2003 ACS on STN
     88971-23-7 REGISTRY
     L-Cysteine, S-[(acetylamino)methyl]-L-cysteinyl-L-phenylalanyl-L-
 CN
     hydrazinophenylalanyl-D-tryptophyl-N6-[[2-(methylsulfonyl)ethoxy]carbonyl]-
     L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-S-[(acetylamino)methyl]-,
```

Audet 734583-claim 9

methyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

L-Cysteine, S-[(acetylamino)methyl]-L-cysteinyl-L-phenylalanyl-L-2-(phenylmethyl)-3-aza-.beta.-alanyl-D-tryptophyl-N6-[[2-

(methylsulfonyl)ethoxy]carbonyl]-L-lysyl-L-threonyl-L-phenylalanyl-Lphenylalanyl-S-[(acetylamino)methyl]-, methyl ester

NTE modified (modifications unspecified)

----- location ----- description uncommon Oaa-3 - - D
stereo Trp-4 - D

SQL 9

1 CFXWKTFFC SEQ ____=

HITS AT: 1-8

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

=>

=> =>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=>
=> d stat que 142
            42 SEA FILE=REGISTRY ABB=ON PLU=ON FWWKTFG/SQSP
L20
            11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20
L22
           5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?
L23
          89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?
L24
            10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24
L25
           467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP
L27
           397 SEA FILE=REGISTRY ABB=ON PLU=ON L27 AND SQL>=7
L34
           127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR
L35
               MULTICHAI?)
            46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
L36
            41 SEA FILE=HCAPLUS ABB=ON
                                        PLU=ON L36 AND L24
L37
            41 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L25
L38
            17 SEA FILE=REGISTRY ABB=ON PLU=ON F[YF]WK[TVS].G/SQSP
L40
            19 SEA FILE=HCAPLUS ABB=ON PLU=ON L40
L41
             O SEA FILE=HCAPLUS ABB=ON PLU=ON
                                               (L41 AND L24) NOT (L25 OR
L42
                L38)
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=> fil reg FILE 'REGISTRY' ENTERED AT 11:26:11 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d .seq 140 1-17

L40 ANSWER 1 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 487165-49-1 REGISTRY

CN GenBank AAN55789 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAN55789 (Translated from: GenBank AE015715)

SQL 271

SEQ 51 YIPNEVQRFN EKANPTYGVF LRRNGMSYHD FFWKTDGSAM NAYLESLILD

======

HITS AT: 81-87

RELATED SEQUENCES AVAILABLE WITH SEQLINK

L40 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486590-37-8 REGISTRY

CN GenBank CAA48774 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank CAA48774 (Translated from: GenBank X68978)

SOL 157

SEQ 51 SENCVFFWKS VGIYTDLEGK AIEQFIDVFK DQNFPPGASI LFTQSPKGSL

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HITS AT: 56-62

L40 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 486590-04-9 REGISTRY

CN GenBank CAA48775 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank CAA48775 (Translated from: GenBank X68979)

SQL 156

SEQ 51 ENCVFFWKSV GIYTDLEGKA IEQFIDAFKD QNFPPGASIL FTQSPKGSLT

==========

HITS AT: 55-61

L40 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 476249-60-2 REGISTRY

CN Protein (Shewanella oneidensis MR-1 strain MR-1 gene SO2763) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AE015715-derived protein GI 24348843

SQL 271

SEQ 51 YIPNEVQRFN EKANPTYGVF LRRNGMSYHD FFWKTDGSAM NAYLESLILD

======

HITS AT: 81-87

RELATED SEQUENCES AVAILABLE WITH SEOLINK

REFERENCE 1: 138:148478

L40 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN .

RN 475384-52-2 REGISTRY

CN Pyruvate formate-lyase activating enzyme (Bifidobacterium longum strain strain NCC2705 gene BL1726) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAN25510

CN GenBank AAN25510 (Translated from: GenBank AE014806)

SQL 390

SEQ 201 YMSAEARPDF YAAMDAANID LKGFTEEFYW KVTGTHLADV LETIDYAVNE

=== ====

HITS AT: 228-234

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:364099

L40 ANSWER 6 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 443419-22-5 REGISTRY

CN Protein (Bifidobacterium longum strain NCC2705 open reading frame ORF3505)

(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1047: PN: EP1227152 SEQID: 1048 claimed protein

SQL 390

SEQ 201 YMSAEARPDF YAAMDAANID LKGFTEEFYW KVTGTHLADV LETIDYAVNE

=== ====

HITS AT: 228-234

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:104827

L40 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 440266-09-1 REGISTRY

CN Protein (Chlorobium tepidum strain TLS gene CT0880) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AAM72115

CN GenBank AAM72115 (Translated from: GenBank AE012854)

SOL 407

SEQ 151 KNGFFWKTYG NHDSDLFEER NYPLSKHLLE SIRFQYGDEV MLLFHGHQAS

HITS AT: 154-160

REFERENCE 1: 137:74286

L40 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

RN 352735-88-7 REGISTRY

CN Lung-associated antigen (human clone HAPRG26 fragment) (9CI) (CA INDEX

NAME)

OTHER NAMES:

CN 154: PN: WO0155303 SEQID: 163 claimed protein

SQL 124

HITS AT:

SEQ 51 TFSFFWKTQG EQSRPIPSAY GGQVISNGFK VCSSGGRGSV ELYTRDNSMT

REFERENCE 1: 135:163385

54-60

L40 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN

```
RN
     299248-18-3 REGISTRY
     G-protein-coupled receptor BG3 (human) (9CI) (CA INDEX NAME)
CŃ
OTHER NAMES:
     2: PN: WO0058462 SEQID: 6 claimed protein
CN
    874
SQL
SEQ
      101 GPEGVTFSFF WKTQGEQSRP IPSAYGGQVI SNGFKVCSSG GRGSVELYTR
HITS AT:
         109-115
REFERENCE 1: 133:277841
L40 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    252845-41-3 REGISTRY
CN
    .beta.-Alanine, N-(2-aminoethyl)-L-phenylalanyl-L-phenylalanyl-D-
    tryptophyl-L-lysyl-L-threonyl-3-(2-naphthalenyl)-L-alanyl-N-(2-amino-2-
    oxoethyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)
OTHER NAMES:
   PTR 3203
CN
NTE modified (modifications unspecified)
_______
              ----- location ----- description
__________
bridge Phe-1 - Gly-7 lactam stereo Trp-3 - D
SQL 7
SEO
       1 FFWKTAG
HITS AT:
         1-7
REFERENCE 1: 136:341003
REFERENCE 2: 132:50250
L40 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    252845-40-2 REGISTRY
CN
    .beta.-Alanine, N-(2-aminoethyl)-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
    lysyl-L-seryl-3-(2-naphthalenyl)-L-alanyl-N-(2-amino-2-oxoethyl)-,
    (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
   PTR 3201
NTE modified (modifications unspecified)
              ----- location ----- description
SQL 7
SEO
       1 FYWKSAG
         ======
         1-7
HITS AT:
REFERENCE 1: 136:341003
REFERENCE
         2: 132:50250
L40 ANSWER 12 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    204388-06-7 REGISTRY
CN
    Cyclo(L-asparaginyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-
```

Audet 734583-claim 6

```
threonyl-L-phenylalanylglycyl) (9CI) (CA INDEX NAME)
OTHER NAMES:
    86: PN: US20020042374 PAGE: 10 claimed protein
CN
    90: PN: US6268342 SEQID: 96 claimed protein
CN
NTE
    cyclic
SQL
    8
SEQ
        1 NFFWKTFG
          ======
HITS AT:
         2-8
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
          1: 137:295256
REFERENCE
REFERENCE
          2: 136:304089
REFERENCE
          3: 135:132468
REFERENCE
          4: 131:295567
REFERENCE
          5: 130:20992
REFERENCE
          6: 130:20991
REFERENCE
         7: 128:226683
L40 ANSWER 13 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    183971-53-1 REGISTRY
CN
    Protein (Caenorhabditis elegans clone B0334 potassium channel-forming)
    (9CI) (CA INDEX NAME)
OTHER NAMES:
    B0334 potassium channel (Caenorhabditis elegans clone B0334 4TM)
CN
    GenBank Z66519-derived protein GI 1089818
SQL
SEQ
     101 LGNFGKYLTK FYWKTHGWIF SERTESELVN DKDMPGIVIA CLYLLTFAIG
HITS AT:
         111-117
REFERENCE
        1: 126:2241
L40 ANSWER 14 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
    161889-28-7 REGISTRY
RN
CN
    phenylalanyl]-L-tyrosyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-
    phenylalanyl]glycyl]glycyl]-L-lysyl-L-lysyl- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
----- location ----- description
-------
uncommon
             0aa-11
                                 . D
stereo
             Phe-1
                                 D
stereo
             Trp-4
SQL 13
SEO
       1 FFYWKTFGGG XKC
HITS AT:
         2-8
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Page 5

REFERENCE 1: 124:49695

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ANSWER 15 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
 RN
           150243-71-3 REGISTRY
           L-Proline, L-seryl-L-alpha.-glutamyl-L-threonyl-L-tyrosyl-L-leucyl-L-
 CN
           leucyl-L-phenylalanyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-threonyl-L-
           histidylglycyl-L-threonyl-L-lysyl-L-asparaginyl-L-tyrosyl-L-phenylalanyl-
           (9CI) (CA INDEX NAME)
 SQL
           19
 SEO
                   1 SETYLLFFWK THGTKNYFP
                                   ==== ===
 HITS AT:
                       7-13
 REFERENCE
                        1: 119:178972
          ANSWER 16 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
 RN
           72127-64-1 REGISTRY
 CN
          {\tt Cyclo[L-asparaginyl-L-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-D-tryptophyl-N6-[(1,1-phenylalanyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-trypto
          dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-L-
          phenylalanylglycyl] (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
          1,4,7,10,13,16,19,22-Octaazacyclotetracosane, cyclic peptide deriv.
          Cyclic[L-asparaginyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-N6-[(1,1-
 CN
          dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-L-
          phenylalanylglycyl]
        cyclic
          modified (modifications unspecified)
 type ----- location ----- description
SQL 8
SEQ
                  1 NFFWKTFG
                       ======
HITS AT:
                      2 - 8
**RELATED SEQUENCES AVAILABLE WITH SEOLINK**
REFERENCE
                     1: 92:6946
L40 ANSWER 17 OF 17 REGISTRY COPYRIGHT 2003 ACS on STN
          72127-62-9 REGISTRY
RN
CN
         Cyclo(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-
         L-phenylalanyl) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
         1,4,7,10,13,16,19-Heptaazacycloheneicosane, cyclic peptide deriv.
CN
         Cyclic(glycyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-
CN
         threonyl-L-phenylalanyl)
OTHER NAMES:
        84: PN: US20020042374 PAGE: 10 claimed protein
CN
CN
         88: PN: US6268342 SEQID: 94 claimed protein
NTE cyclic
SQL
SEO
                  1 GFFWKTF
HITS AT:
                     1.2-7
REFERENCE
                     1: 137:295256
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REFERENCE

2: 136:304089

REFERENCE	3:	135:132468
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REFERENCE	4:	131:295567
レロしロビビロハ	4:	131:795567

REFERENCE 5: 130:20992

REFERENCE 6: 130:20991

REFERENCE 7: 128:226683

REFERENCE 8: 92:6946

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=>
=> d stat que 138
            42 SEA FILE=REGISTRY ABB=ON PLU=ON FWWKTFG/SQSP
L22
            11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20
L23
          5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?
L24
         89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?
L25
           10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24
L27
           467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP
L34
           397 SEA FILE=REGISTRY ABB=ON ^{\circ} PLU=ON L27 AND SQL>=7
L35
           127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR
               MULTICHAI?)
            46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
L36
L37
            41 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND L24
L38
            41 SEA FILE-HCAPLUS ABB=ON PLU=ON L37 NOT L25
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=> d ibib abs hitrn 138 1-41

=>

L38 ANSWER 1 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:793646 HCAPLUS

DOCUMENT NUMBER: 137:295256

TITLE: Preparation of cyclic peptides as somatostatin

agonists

INVENTOR(S): Coy, David H.; Rajeswaran, Walajapet G.

PATENT ASSIGNEE(S): The Administrators of the Tulane Educational Fund, USA

SOURCE: PCT Int. Appl., 43 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2002081499
                       A2
                            20021017
                                           WO 2002-US10882 20020408
     WO 2002081499
                       А3
                            20030508
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                        US 2001-282526P P 20010409
                         MARPAT 137:295256
OTHER SOURCE(S):
     The invention is directed to cyclic peptides A1-cyclo[Cys-A2-D-Trp-A3-A4-
AB
     Cys}-A5-Y1 [A1 is an optionally-substituted D- or L-arom. .alpha.-amino
     acid or D- or L-cyclo(C3-6)alkylalanine; A2 is an optionally-substituted
     arom. .alpha.-amino acid or cyclo(C3-6)alkylalanine; A3 is Lys or Orn; A4,
     A5 = .beta.-hydroxyvaline, Ser, hSer, or Thr; Y1 is OH, NH2 or alkylamino;
     the substituent on the arom. .vsigma.-amino acid or cyclo(C3-
     6) alkylalanine is selected from halogen, NO2, OH, CN, alkyl, alkenyl,
     alkynyl, alkoxy, Bzl, O-Bzl, or an amino group; the amine nitrogen of each
     amide peptide bond and the amino group of Al is optionally substituted
     with a Me group (there is at least one Me group)] and their
     pharmaceutically-acceptable salts for use as somatostatin
     agonists. The solid-phase method was applied to the synthesis of 18
     cyclic peptides of the invention, including NMe-D-Phe-cyclo[Cys-Phe-D-Trp-
     Lys-Thr-Cys]-Thr-NH2 (1). Peptide 1 showed binding affinities Kd for
     cloned human sst1-5 receptors of 316 .+-. 11, 1.03 .+-. 0.26, 17.9 .+-.
     2.5, >1.000, and 4.89 .+-. 1.4 nM, resp., and agonist activity IC50 = 0.32
     .+-. 0.13 nM on culture rat pituitary cells.
ΙT
     9002-62-4, Prolactin, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (hyperprolactinemia; prepn. of cyclic peptides as somatostatin
        agonists)
IT
     51110-01-1, Somatostatin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (prepn. of cyclic peptides as somatostatin agonists)
     72127-62-9DP, N-Me derivs. 76587-47-8DP, N-Me derivs.
ΙT
     76587-65-0DP, N-Me derivs. 76587-78-5DP, N-Me derivs.
     79775-25-0DP, N-Me derivs. 79814-97-4DP, N-Me derivs.
     204388-06-7DP, N-Me derivs. 204388-11-4DP, N-Me derivs.
     216259-60-8DP, N-Me derivs...
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (prepn. of cyclic peptides as somatostatin agonists)
                     HCAPLUS COPYRIGHT 2003 ACS on STN
    ANSWER 2 OF 41
                                      HCAPLUS
ACCESSION NUMBER:
                         2002:276518
                         136:304089
DOCUMENT NUMBER:
                         Method of treating insulin insensitivity and syndrome
TITLE:
                         Cawthorne, Michael Anthony; Liu, Yong-ling; Sennitt,
INVENTOR(S):
                         Matthew V.
PATENT ASSIGNEE(S):
                         UK
SOURCE:
                         U.S. Pat. Appl. Publ., 15 pp.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
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PATENT INFORMATION:

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PATENT NO.
                    KIND DATE
                                              APPLICATION NO. DATE
                              -----
                                               _____
      US 2002042374 A1
                               20020411
                                            US 1998-76948
                                                                19980513
 PRIORITY APPLN. INFO.:
                                            US 1997-46373P P 19970513
 OTHER SOURCE(S):
                          MARPAT 136:304089
      The present invention relates to a method of treating insulin resistance
      or syndrome X in a patient. The method includes the step of administering
      a therapeutically effective amt. of a somatostatin or a
      somatostatin agonist to said patient. Among examples provided
      are: binding of several somatostatin agonists to human
      somatostatin receptors, improvement of insulin sensitivity in
      BIM-23268-treated fatty Zucker rats, and redn. of hypertriglyceridemia by
      BIM-23268C in obese Zucker rats.
      51110-01-1, Somatostatin-14 75037-27-3,
TΤ
      Somatostatin-28
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (somatostatin and somatostatin agonists in
         treatment of insulin insensitivity and syndrome X)
ΙT
      72127-62-9 76587-47-8 76587-65-0
      76587-78-5 79775-25-0 79814-97-4
      204388-06-7 204388-11-4 216259-60-8
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (somatostatin and somatostatin agonists in
         treatment of insulin insensitivity and syndrome X)
     ANSWER 3 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:560059 HCAPLUS
DOCUMENT NUMBER:
                           135:132468
TITLE:
                           Method of inhibiting fibrosis with a
                           somatostatin or somatostatin agonist
INVENTOR(S):
                           Culler, Michael D.; Kasprzyk, Philip G.
PATENT ASSIGNEE(S):
                           Biomeasure Inc., USA
SOURCE:
                           U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 705,790,
                           abandoned.
                           CODEN: USXXAM
DOCUMENT TYPE:
                           Patent
LANGUAGE:
                           English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                   KIND DATE
     PATENT NO.
                                             APPLICATION NO. DATE
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                       ____
                             -----
                                              _____
     US 6268342
                      В1
                              20010731
                                            US 1999-254097
                                                                19990510
     WO 9808529
                       A1
                            19980305
                                             WO 1997-US14154 19970827
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
         LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
     US 2001011072
                       A1
                              20010802
                                              US 2001-761605
                                                                20010116
PRIORITY APPLN. INFO.:
                                           US 1996-705790 B2 19960830
                                           WO 1997-US14154 W 19970827
                                           US 1999-254097
                                                            A3 19990510
OTHER SOURCE(S):
                          MARPAT 135:132468
     The invention discloses a method of inhibiting fibrosis in a patient.
     method comprises administering a therapeutically effective amt. of a
     somatostatin, a somatostatin agonist, or a
     pharmaceutically acceptable salt thereof, to the patient.
```

ΙT 51110-01-1, Somatostatin 72127-62-9 75037-27-3, Somatostatin-28 76587-47-8 76587-65-0 76587-78-5 79775-25-0 79814-97-4 204388-06-7 204388-11-4 216259-60-8

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(somatostatin or somatostatin agonist for fibrosis

inhibition)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 4 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:255846 HCAPLUS

DOCUMENT NUMBER: 134:300763

TITLE:

Somatostatin analogs INVENTOR(S): Dean, Richard T. PATENT ASSIGNEE(S): Diatide, Inc., USA

U.S., 16 pp., Cont.-in-part of U.S. 6,017,509. SOURCE:

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 6214316	В1	20010410	US 1999-420865 19991019
US 6017509	A	20000125	US 1993-92355 19930715
PRIORITY APPLN.	INFO.:		US 1993-92355 A2 19930715
			US 1991-807062 A2 19911127

OTHER SOURCE(S): MARPAT 134:300763

This invention relates to therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents. Specifically, the invention relates to cyclic peptide derivs. and analogs of somatostatin, and embodiments of such peptides radiolabeled with a radioisotope, as well as methods and kits for making, radiolabeling and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with cytotoxic radioisotopes such as rhenium-186 (186 Re) and rhenium-188 (188 Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling and using such peptides diagnostically and therapeutically in a mammalian body are also provided.

ΙT 161982-27-0P 161982-28-1P 161982-29-2P

161982-30-5P 161982-32-7P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(radiolabeled somatostatin analogs)

161982-29-2D, rhenium complex IT

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (radiolabeled somatostatin analogs)

51110-01-1D, Somatostatin, radiolabeled analogs TΤ

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(radiolabeled somatostatin analogs)

40958-31-4, Somatostatin (sheep reduced)

RL: PRP (Properties)

(unclaimed sequence; somatostatin analogs)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 5 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:91402 HCAPLUS

DOCUMENT NUMBER: 134:152627

TITLE: Somatostatin analogs

INVENTOR(S): Dean, Richard T.; Lister-James, John

PATENT ASSIGNEE(S): Diatide, Inc., USA

SOURCE: U.S., 17 pp., Cont.-in-part of U.S. 6,017,509.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6183722	В1	20010206	US 1999-420866	19991019
US 5443815	A	19950822	US 1991-807062	19911127
US 6017509	A	20000125	US 1993-92355	19930715
PRIORITY APPLN. IN	FO.:		US 1991-807062 A2	19911127
			US 1993-92355 A2	19930715

OTHER SOURCE(S): MARPAT 134:152627

This invention relates to therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents. Specifically, the invention relates to cyclic peptide derivs. and analogs of somatostatin, and embodiments of such peptides radiolabeled with a radioisotope, as well as methods and kits for making, radiolabeling and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with cytotoxic radioisotopes such as rhenium-186 (186 Re) and rhenium-188 (188 Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling and using such peptides diagnostically and therapeutically in a mammalian body are also provided.

IT 161982-27-0D, rhenium complex 161982-30-5D, rhenium

complex

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(radiolabeled somatostatin analogs for radiodiagnosis and

radiotherapy: receptor binding)

IT 161982-27-0P 161982-28-1P 161982-29-2P

161982-30-5P 161982-32-7P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(reagents and kits for prepg. radiolabeled somatostatin

analogs for radiodiagnosis and radiotherapy)

IT 51110-01-1D, Somatostatin, analogs, radiolabeled

complexes

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (reagents and kits for prepg. radiolabeled somatostatin

analogs for radiodiagnosis and radiotherapy)

IT 40958-31-4, Somatostatin (sheep reduced)

RL: PRP (Properties)

(unclaimed sequence; somatostatin analogs)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 6 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:66743 HCAPLUS

DOCUMENT NUMBER: 132:119359

TITLE: Radiolabeled somatostatin receptor-binding

peptides

INVENTOR(S): Dean, Richard T.; McBride, William; Lister-James, John

PATENT ASSIGNEE(S): Diatide, Inc., USA

SOURCE: U.S., 18 pp., Cont.-in-part of U.S. 5,443,815.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE: Enc FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PA:	TENT NO.		KIND	DATE		APPLICATION NO. DATE	
US	6017509		A	20000125		US 1993-92355 19930715 US 1991-807062 19911127 ES 1993-901469 19921119 ZA 1993-7504 19931011 CA 1994-2347670 19940603 WO 1994-US6274 19940603	
ES.	2172513		ጥን	20021001		ES 1993-901469 19921119	٠
7.A	9307504		A	19940804		ZA 1993-7504 19931011	
CA	2347670		AA	19950105		CA 1994-2347670 19940603	
WO	9500553		A1	19950105		WO 1994-US6274 19940603	
	W: AU,	CA,	JP, US				
	RW: AT.	BE.	CH. DE	. DK. ES.	FR,	, GB, GR, IE, IT, LU, MC, NL, PT, SE	
AU	9470990		A1	19950117		AU 1994-70990 19940603	
AU	701083		B2	19990121			
EP	720621		A1	19960710		AU 1994-70990 19940603 EP 1994-920076 19940603	
EP	720621		B1	20010207			
	R: AT,	BE,	CH, DE	, DK, ES,	FR,	, GB, GR, IE, IT, LI, NL, SE	
US	5997844		Α	19991207		US 1994-253678 19940603	
AT	199089		E	20010215		AT 1994-920076 19940603	
EP	1092726		A2	20010418		US 1994-253678 19940603 AT 1994-920076 19940603 EP 2000-122241 19940603	
EP	1092726		A3	20020109		CD CD TE LT M CE TE	
	R: AT,	BE,	CH, DE	, DK, ES,	FR,	, GB, GR, IT, LI, NL, SE, IE	
EP	1099707		A2	20010516		EP 2000-122242 19940603	
			~	5 50		OD OD TH IT NI OD TH	
CA	K: AT,	BE,	CH, DE	, DK, ES,	rK,	CA 1994-2167281 19940603 ES 1994-920076 19940603 SG 1999-3785 19940603 US 1995-462212 19950605 US 1995-471741 19950606 US 1996-582134 19960514 AU 1997-34151 19970813 US 1997-931095 19970915 US 1999-420866 19991019 US 1999-420865 19991019 US 1991-807062 A2 19911127	
CA	216/281		шэ С	20010904		FC 1004-020076 19940003	
5C	2136697		7.1	20010310		SC 1999-3785 19940603	
115	5807537		ΔΙ	19980915		US 1995-462212 19950605	
US	5814297		A	19980929		US 1995-471741 19950606	
US	6074627		A	20000613		US 1996-582134 19960514	
AU	9734151		A1	19971106		AU 1997-34151 19970813	
, AU	721198		В2	20000629			
US	6017512		A	20000125		US 1997-931095 19970915	
US	6183722		B1	20010206		US 1999-420866 19991019	
US	6214316		В1	20010410		US 1999-420865 19991019	
PRIORIT	Y APPLN.	INFO	.:				
•						US 1991-653012 B2 19910208 US 1992-902935 A2 19920623	
						WO 1993-US6029 W 19930623	
				20010410		US 1993-92355 A 19930715	
						CA 1994-2167281 A3 19940603	
						EP 1994-920076 A 19940603	
						US 1994-253678 A3 19940603 . WO 1994-US6274 W 19940603	
						WO 1994-US6274 W 19940603	

AB This invention relates to therapeutic reagents and peptides, including radiotherapeutic reagents and peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents. Specifically, the invention relates to cyclic peptide derivs. and analogs of somatostatin, and embodiments of such peptides radiolabeled

with a radioisotope, as well as methods and kits for making, radiolabeling and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with cytotoxic radioisotopes such as rhenium-186 (186Re) and rhenium-188 (188Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling and using such peptides diagnostically and therapeutically in a mammalian body are also provided.

IT 51110-01-1D, Somatostatin, radiolabeled

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(radiolabeled somatostatin receptor-binding peptides)

IT 161982-27-0P 161982-28-1P 161982-29-2P 161982-30-5P 161982-32-7P 177788-58-8P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(radiolabeled somatostatin receptor-binding peptides)

IT 51110-01-1D, Somatostatin, radiolabeled analogs

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(radiolabeled somatostatin receptor-binding peptides)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 7 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:780311 HCAPLUS

DOCUMENT NUMBER: 132:20545

TITLE: Technetium-99m labeled peptides for imaging

INVENTOR(S): Dean, Richard T.; Buttram, Scott; Mcbride, William;

Lister-James, John; Civitello, Edgar R.

PATENT ASSIGNEE(S): Diatide, Inc., USA

SOURCE: U.S., 23 pp., Cont.-in-part of U.S. Ser. No. 653,012,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5989519 CA 2191950	A A AA	20000125 19991123 19951214	US 1993-92355 US 1994-290853 CA 1995-2191950	19940603 19930715 19941011 19950601
WO 9533498	AI , BR, CA, CN		WO 1995-US7017	19950601
RW: AT, AU 9527783	, BE, CH, DE	DK, ES, 19960104	FR, GB, GR, IE, IT, LU, AU 1995-27783	
			EP 1995-922946	19950601
R: AT, CN 1154072	, BE, CH, DE	DK, ES, 19970709	FR, GB, GR, IE, IT, LI, CN 1995-194335	LU, MC, NL, PT, SE
JP 10501243	1 Т2	19980203		19950601
ZA 9504547 US 5681541	A	19971028	US 1995-464456	19950602 19950605
US 5788960 US 6074627				19950605 19960514
US 5997845 PRIORITY APPLN.	A		US 1997-902367	

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A2 19930715
US 1993-92355
                A2 19911127
US 1991-807062
                B2 19920313
US 1992-851074
                B1 19920521
US 1992-886752
                A3 19920605
US 1992-893981
                W 19930312
WO 1993-US2320
US 1993-44825
                B1 19930408
US 1994-253678
                A2 19940603
US 1994-263758
                A3 19940622
US 1994-273274
               A2 19940711
US 1995-439905 A3 19950512
WO 1995-US7017
               W 19950601
               B1 19950605
US 1995-462668
US 1995-469858
                A 19950606
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MARPAT 132:20545 OTHER SOURCE(S):

This invention relates to radiolabeled peptides and methods for producing such peptides. Specifically, the invention relates to peptides, methods and kits for making such peptides, and methods for using such peptides to image sites in a mammalian body labeled with technetium-99m (Tc-99m) via a radiolabel-binding moiety covalently attached to a specific binding peptide via an amino acid side-chain of the peptide.

161982-57-6DP, 99mTc-labeled 161982-59-8DP, TΤ

99mTc-labeled 172485-52-8DP, 99mTc-labeled 172485-58-4DP

, 99mTc-labeled

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(technetium-99m labeled peptides for imaging)

161889-37-8DP, 99mTc-labeled

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(technetium-99m labeled peptides for imaging)

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 53 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 8 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1999:704836 HCAPLUS

DOCUMENT NUMBER:

131:327610

TITLE:

Labeled somatostatin analogs for imaging

cardiovascular disease

INVENTOR(S):

Dean, Richard T.; Lister-James, John

PATENT ASSIGNEE(S):

Diatide, Inc., USA

SOURCE:

U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 253,973.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

44

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
- 			
US 5976496	A	19991102	US 1997-976995 19971124
CA 2191951	AA	19951214	CA 1995-2191951 19950601
CN 1158090	A	19970827	CN 1995-194356 19950601
CN 1093424	В	20021030	
ZA 9504548	A	19960315	ZA 1995-4548 19950602
PRIORITY APPLN. I	NFO.:		US 1994-253973 A2 19940603

The invention provides methods and kits for detecting cardiovascular AB disease in a living mammal, using a labeled form of a somatostatin analog. Suitable labels are 1231, 67Ga, 111In and 99mTc. The methods and kits of the invention provide early detection of atherosclerotic plaque, in particular, unstable atherosclerotic plaque, thus allowing therapeutic intervention prior to acute and potentially fatal incidents of

```
cardiovascular disease. Thus, localization and in-vivo imaging of
     atherosclerotic plagues was carried out in hypercholesteremic rabbits
     using Tc-99m-labeled somatostatin analogs.
     38916-34-6D, Somatostatin, analogs, labeled
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (agents for imaging cardiovascular disease)
     161889-37-8D, labeled 161982-27-0D, labeled 161982-28-1D, labeled 161982-30-5D, labeled 161982-55-4D, labeled 161982-57-6D, labeled 161982-58-7D, labeled 161982-59-8D, labeled 161982-60-1D, labeled 174350-62-0D, labeled
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (somatostatin analog for imaging cardiovascular disease)
                                    THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                             18
                                    RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
                        HCAPLUS COPYRIGHT 2003 ACS on STN
L38 ANSWER 9 OF 41
                             1999:670109 HCAPLUS
ACCESSION NUMBER:
                             131:295567
DOCUMENT NUMBER:
                             Inhibition of Helicobacter pylori proliferation
TITLE:
                             Kaneko, Hiroshi; Mitsuma, Terunori; Yamashita, Koichi;
INVENTOR(S):
                             Morgan, Barry
                             Biomeasure, Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                             U.S., 19 pp.
                             CODEN: USXXAM
DOCUMENT TYPE:
                             Patent
                             English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                 APPLICATION NO. DATE
     PATENT NO.
                        KIND DATE
      _____
                                _____
                                                  _____
                                                 US 1998-74117
                                                                       19980507
                                19991019
     US 5968903 A
                                                  WO 1999-US10058 19990506
                               19991111
                          A2
     WO 9956769
                               20001109
                          A3
    .WO 9956769
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
               DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
               RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                               AU 1999-39754
                                 19991123
                                                                       19990506
     AU 9939754
                          A1
                                                 EP 1999-922851
                                                                       19990506
      EP 1075273
                          A2
                                 20010214
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                        T2
                                 20020514
                                                   JP 2000-546793
                                                                      19990506
      JP 2002513769
                                                   NO 2000-5588
      NO 2000005588
                                 20010105
                                                                       20001106
                          Α
                                                                   A1 19980507
                                               US 1998-74117
PRIORITY APPLN. INFO.:
                                               WO 1999-US10058 W 19990506
                             MARPAT 131:295567
OTHER SOURCE(S):
     The present invention is directed to a method of using
      somatostatin or a somatostatin agonist to inhibit the
      proliferation of Helicobacter pylori (H. pylori), which comprises
      administering to a patient in need thereof an effective amt. of said
      somatostatin or somatostatin agonist. Preferably, a
      somatostatin sub-type receptor 2 (SSTR-2) selective
      somatostatin agonist is administered in a method of this
      invention. The inhibition of H. pylori proliferation is useful in
      treating various gastroduodenal diseases such as peptic ulcers, gastric
      cancer and gastric lymphoma.
```

51110-01-1, Somatostatin

IΤ

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(agonists; inhibition of Helicobacter pylori proliferation with

somatostatin or a somatostatin agonist)

72127-62-9 79775-25-0 79814-97-4 IT 95244-38-5 204388-06-7 204388-11-4

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(inhibition of Helicobacter pylori proliferation with

somatostatin or a somatostatin agonist)

THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 61 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 10 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1998:764305 HCAPLUS

DOCUMENT NUMBER:

130:20992

TITLE:

Somatostatin and somatostatin

agonists for treating insulin insensitivity and

Syndrome X

INVENTOR(S):

Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt,

Matthew V.

PATENT ASSIGNEE(S):

Societe De Conseils De Recherches Et D'Applications

Scientifiques S.A. (S.C., Fr.

SOURCE:

PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	rent :	NO.		KI	ND :	DATE			A	PPLI	CATI	и ис	э.	DATE			
WO 9851332 A1 19981119						W	0 19:	98-E	P300	0	1998	0513					
	W:	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,
		KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
		UA,	UG,	US,	UZ,	VN,	YU,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	MT
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,
		FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
		CM,	GΑ,	GN,	ML,	MR,	NE,	SN,	TD,	TG							
	9880																
EΡ	9802	53		Α	1 -:	2000	0223		E	P 19:	98-9	2830	8	1998	0513		
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	FI														
RIT	Y APP	LN.	INFO	. :				1	US 1	997-	8549	43		1997	0513		
								1	-T	000 1	ロロコム	$^{\circ}$		1000	1512		

PRIOR

WO 1998-EP3000 19980513

MARPAT 130:20992 OTHER SOURCE(S):

The present invention relates to a method of treating insulin resistance or Syndrome X. The method includes the step of administering a therapeutically effective amt. of a somatostatin or a somatostatin agonist to said patient. The invention also includes pharmaceutical compns. comprising a somatostatin or somatostatin agonist and the use of such products in the prepn. of such compns.

TΤ 51110-01-1, Somatostatin 72127-62-9 76587-47-8 76587-65-0 76587-78-5 79775-25-0 79814-97-4 204388-06-7 204388-11-4 216259-60-8

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(somatostatin and somatostatin agonists for treating insulin insensitivity and Syndrome X)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 11 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:764304 HCAPLUS

DOCUMENT NUMBER: 130:20991

TITLE: Somatostatin and somatostatin

agonists for decreasing body weight

INVENTOR(S): Cawthorne, Michael Anthony; Liu, Yong-Ling; Sennitt,

Matthew V.

PATENT ASSIGNEE(S): Societe De Conseils De Recherches Et D'Applications

Scientifiques S.A. (S.C., Fr.

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----WO 9851331 A1 19981119 WO 1998-EP2999 19980513 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, M: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9876550 AU 1998-76550 Al 19981208 19980513 EP 981363 EP 1998-924317 19980513 Α1 20000301 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.:

US 1997-854941 19970513 WO 1998-EP2999 19980513

OTHER SOURCE(S): MARPAT 130:20991

The present invention relates to a method of decreasing body wt. in a patient. The method includes the step of administering a therapeutically effective amt. of a somatostatin or a somatostatin agonist to said patient. A pharmaceutical/cosmetic compn. comprises the somatostatin or somatostatin agonist. Such products are used to prep. such compns. for the redn. of body wt. in a human or mammalian animal.

ΙT 51110-01-1, Somatostatin 72127-62-9 76587-47-8 76587-65-0 76587-78-5 79775-25-0 79814-97-4 204388-06-7 204388-11-4 216259-60-8

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(somatostatin and somatostatin agonists for

decreasing body wt.)

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 12 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:490443 HCAPLUS

DOCUMENT NUMBER: 129:136495

TITLE: Preparation of somatostatin

Audet 734583-claim 5

cyclopeptide-radiometal chelate conjugates

INVENTOR(S): Dean, Richard T. PATENT ASSIGNEE(S): Diatide, Inc., USA

SOURCE: U.S., 17 pp., Cont.-in-part of U.S. 5,433,815.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

			APPLICATION NO.	
US 5783170 US 5443815 ES 2172513 ZA 9307504	A A T3 A	19980721 19950822 20021001 19940804	US 1994-241625 US 1991-807062 ES 1993-901469 ZA 1993-7504 CA 1995-2190108	19940512 19911127 19921119 19931011
	AA A1 CA, CN, JP	10001120	CA 1995-2190108 WO 1995-US6034	19950512 19950512
RW: AT.	BE, CH, DE	. DK. ES.	FR, GB, GR, IE, IT, L AU 1995-25500	U, MC, NL, PT, SE 19950512
R• AT	RE CH DE	חגר דכ	AU 1995-25500 ZA 1995-3878 EP 1995-919827	T III MO NI DO OD
CN 1155248 CN 1078480	A B	19970723 20020130	CN 1995-193841	19950512
US 5807537 US 5814297	T2 A · A	19980113 19980915 19980929	JP 1995-529821 US 1995-462212 US 1995-471741 AU 1997-34151	19950512 19950605 19950606
AU 9734151 AU 721198 US 5965108	A1 B2 A	19971106 20000629 19991012	AU 1997-34151 ÚS 1998-39062	19970813
US 5972308 US 5981477	A A	19991026 19991109	US 1998-42224 US 1998-39116 US 1998-42315	19980313 19980313
PRIORITY APPLN.	INFO.:	13331110	US 1991-807062 A: US 1994-241625 A WO 1995-US6034 W	2 19911127 19940512

OTHER SOURCE(S): MARPAT 129:136495

GΙ

CH2CO-X -MePhe-Tyr-D-Trp-Lys-Val-Hcy

This invention relates to **somatostatin** analog cyclopeptides I [X = metal ion complexing moiety (AA)n-B-(AA)m-Z; B = Cys, homocysteine (Hcy), penicillamine; AA = independently any .alpha. - or .beta.-amino acid that does not contain a thiol group; Z = OH, NH2; n = 2-5; m = 0-5] as diagnostic and radiodiagnostic agents, including radiolabeled scintigraphic imaging agents, and therapeutic and radiotherapeutic agents. The invention provides such agents and reagents for prepg. such agents, and methods for producing and using such reagents. Specifically, the invention provides radiolabeled imaging agents and non-radioactively labeled imaging agents for imaging sites in a mammalian body and reagents for prepg. these imaging agents. The invention also provides radiolabeled therapeutic agents, as well as non-radioactively labeled therapeutic agents, and reagents and methods for prepg. these agents. The agents and

Ι

reagents provided comprise a specific binding peptide, covalently linked to a metal ion-complexing moiety. Reagents, methods and kits for making such reagents, methods for labeling such reagents, and methods for using such labeled reagents are provided. Thus, cyclopeptides I (X = Gly-Gly-Cys-R; R = H, Lys-NH2, Arg-NH2, Orn-NH2, Arg-Lys-NH2, Lys-Lys-NH2) were prepd. by sold. couplings and complexes with technetium-99m to give the corresponding radionuclide complexes.

161889-37-8DP, complexes with technetium-99m 161982-57-6DP, complexes with technetium-99m 161982-59-8DP, complexes with technetium-99m 172485-51-7P 172485-52-8DP, complexes with technetium-99m 172485-53-9P 172485-58-4DP, complexes with technetium-99m

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. of **somatostatin** cyclopeptide-radiometal chelate conjugates)

IT 161889-37-8P 161982-57-6P 161982-59-8P 172485-52-8P 172485-58-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of **somatostatin** cyclopeptide-radiometal chelate conjugates)

REFERENCE COUNT: 88 THERE ARE 88 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 13 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:163467 HCAPLUS

DOCUMENT NUMBER: 128:226683

TITLE: Method of inhibiting fibrosis with a

somatostatin agonist

INVENTOR(S): Culler, Michael D.; Kasprzyk, Philip G.

PATENT ASSIGNEE(S): Biomeasure Incorporated, USA; Culler, Michael D.;

Kasprzyk, Philip G. SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PA'	rent	NO.		KI	ND	DATE			I	APPLI	CATI	ON N	0.	DATE			
WO	9808	529	-	A	1	1998	0305		V	vo 19	97 - U	S141	 54	1997	0827		
	W:	AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU.	CZ.	DE.
		DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	KE.	KG,	KP.	KR.	KZ.
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG.	MK.	MN.	MW.	MX,	NO.	NZ.	PI.
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK.	SL.	TJ.	TM.	TR.	TT,	UA.	UG.	IIS.
		UZ,	VN,	YU,	ZW,	AM,	AZ,	BY,	KG,	KZ.	MD.	RU.	TJ.	TM	011,	00,	00,
	RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT.	BE.	CH.	DE.	DK,	ES.	FT.	FR.
		GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF.	ВJ.	CF.	CG,	CI.	CM.	GA.
		GN,	ML,	MR,	NE,	SN,	TD,	TG	•	,	•		,	,	,	J.1,	0.17
AU	9741	490		A.	1	1998	0319		I	AU 19	97-4	1490		1997	0827		
AU	7267	31		B	2	2000	1116										
EP	9383	28		A.	1	19990	0901		F	CP 19	97-9	3939	2	1997	0827		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI.	LU.	NL,	SE.	MC.	PT.
		ΙE,	FI							•	•	,	•	•	,	,	,
CN	1229	357		Α		19990	0922		C	N 19	97-1	9767	1	1997	0827		
JP	2001	50048	33	T^2		2001				rP 19				1997	0827		
	9707					19990				A 19	97-7	783		1997	0829		
US	62683	342		В:	L.	2001	0731		U	S 19	99-2	5409	7	19990	0510		
PRIORITY	(APP	LN.	INFO.	. :				τ	JS 1	996-	7057	90	A2	19960	0830		
•														1997			

OTHER SOURCE(S): MARPAT 128:226683

The present invention relates to a method of inhibiting fibrosis in a AB patient. The method comprises administering a therapeutically effective amt. of a somatostatin, a somatostatin agonist or a pharmaceutically acceptable salt thereof to said patient.

ΙT 95244-38-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(demethod of inhibiting fibrosis with a **somatostatin** agonist)

51110-01-1, Somatostatin-14 72127-62-9 ΙT 75037-27-3, Somatostatin-28 76587-47-8 76587-65-0 76587-78-5 79775-25-0 79814-97-4 204388-06-7 204388-11-4

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(method of inhibiting fibrosis with a somatostatin agonist) REFERENCE COUNT: 2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 14 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:426626 HCAPLUS

DOCUMENT NUMBER: 125:136537

TITLE: Preclinical evaluation of technetium-99m-labeled

somatostatin receptor-binding peptides Vallabhajosula, Shankar; Moyer, Brian R.; AUTHOR(S):

Lister-James, John; McBride, Bill J.; Lipszyc, Helena;

Lee, Hiram; Bastidas, Diago; Dean, Richard T.

CORPORATE SOURCE: Department Radiology, Mount Sinai Medical Center, New

York, NY, 10029, USA

SOURCE: Journal of Nuclear Medicine (1996), 37(6), 1016-1022 CODEN: JNMEAQ; ISSN: 0161-5505

Society of Nuclear Medicine

DOCUMENT TYPE: Journal LANGUAGE: English

PUBLISHER:

We report here the results of studies on the in vitro receptor binding affinity, in vivo tumor uptake and biodistribution of two 99mTc-labeled peptides. Peptides P587 and P829 were synthesized by N-.alpha.-Fmoc peptide chem., purified by reversed-phase HPLC and characterized by fast-atom bombardment mass spectrometry. The peptides were labeled with 99mTc by ligand exchange from 99mTc-glucoheptonate. In vitro somatostatin receptors (SSTR)-binding affinities of P587, P829 and their oxorhenium complexes, [DTPA]octreotide and In-[DTPA]octreotide were detd. in an inhibition assay using AR42J rat pancreatic tumor cell membranes and 125I-[Tyr3] somatostatin-14 as the probe. In vivo single- and dual-tracer studies of 99mTc peptides and 111In-[DTPA] octreotide were carried out using Lewis rats bearing CA20948 rat pancreatic tumor implants. Technetium-99m-P587 and 99mTc-P829 of high-specific activity (>60 Ci (2.2 TBq)/mmole) were prepd. in >90% radiochem. yield. P587 and P829 had a Ki = 2.5 nM and 10 nM, resp. [ReO]P587 and [ReO]P829, representing the 99mTc complexes, had Ki = 0.15 nM and 0.32 nM, resp. In comparison, [DTPA] octreotide and In-[DTPA]octreotide had Ki = 1.6 and 1.2 nM, resp. In vivo tumor uptake of 99 mTc-P587 and 99 mTc-P829 was high (4.1 and 4.9%ID/g at 90 min postinjection compared to 2.9% for 111In-[DTPA]octreotide). Tumor/blood and tumor/muscle ratios at 90 min postinjection were 6 and 33 for 99mTc-P587, 21 and 68 for 99mTc-P829, and 22 and 64 for 111In-[DTPA]octreotide. The high SSTR-binding affinity and high, receptor-specific and saturable in vivo tumor uptake indicate that 99mTc-P587 and 99mTc-P829 are promising radiotracers for the clin. detection of SSTR-expressing tumors and other tissues by 99mTc gamma scintigraphy.

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161982-57-6D, technetium-99 conjugates
ΙΤ
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); THU (Therapeutic use);
     BIOL (Biological study); PROC (Process); USES (Uses)
         (preclin. evaluation of technetium-99m-labeled somatostatin
         receptor-binding peptides for potential scintigraphy of
         somatostatin receptor expressing tumors)
ΙT
     174900-52-8P 179818-76-9P
     RL: BPR (Biological process); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
         (preclin. evaluation of technetium-99m-labeled somatostatin
        receptor-binding peptides for potential scintigraphy of
        somatostatin receptor expressing tumors)
L38 ANSWER 15 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN .
ACCESSION NUMBER:
                          1996:367653 HCAPLUS
DOCUMENT NUMBER:
                          125:52519
TITLE:
                          Cyclic hexapeptide somatostatin analogs for
                          radiodiagnosis and radiotherapy
INVENTOR(S):
                          Dean, Richard T.; McBride, William; Lister-James, John
PATENT ASSIGNEE(S):
                         Lister-James, John, USA
SOURCE:
                         PCT Int. Appl., 29 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
     WO 9604308
                                            WO 1995-US9276
                      A1
                            19960215
                                                             19950720
         W: AU, BR, CA, CN, JP, KR, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     US 5932189
                            19990803
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                                           US 1994-282980
                                                             19940729
     CA 2195395
                            19960215
                       AA
                                            CA 1995-2195395 19950720
     CA 2195395
                       С
                            20010501
     AU 9531984
                      A1
                            19960304
                                           AU 1995-31984
                                                             19950720
     AU 702917
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                            19990311
     EP 775160
                      A1
                            19970528
                                            EP 1995-928109
                                                             19950720
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     CN 1161698
                     A
                            19971008
                                            CN 1995-194920
                                                             19950720
     BR 9508467
                       Α
                            19971223
                                            BR 1995-8467
                                                             19950720
     JP 10506880
                       Т2
                            19980707
                                            JP 1995-506575
                                                             19950720
     JP 3117218
                       В2
                            20001211
                                            JP 1996-506575
                                                             19950720
     ZA 9506254
                       Α
                            19960313
                                            ZA 1995-6254
                                                             19950727
     US 5955426
                       Α
                            19990921
                                            US 1997-776160
                                                             19970630
PRIORITY APPLN. INFO.:
                                        US 1994-282980 A2 19940729
                                        WO 1995-US9276
                                                        W 19950720
OTHER SOURCE(S):
                         MARPAT 125:52519
     The invention relates to therapeutic reagents and peptides, including
     radiotherapeutic reagents and peptides, and radiodiagnostic reagents and
     peptides. Specifically, the invention relates to cyclic peptide derivs.
     and analogs of somatostatin, and embodiments of such peptides
     radiolabeled with a radioisotope, as well as methods for using such
     peptides for radiodiagnostic and radiotherapeutic purposes:
     Receptor-binding data are included. Localization and in vivo imaging of
     somatostatin receptor-expressing tumors in rats are described (no
     data).
IT
     51110-01-1DP, Somatostatin, analogs and derivs.
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Page 15
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161982-27-0P 161982-29-2P 161982-30-5P 161982-55-4P 161982-57-6P 161982-58-7P 161982-59-8P 161982-60-1P 172485-51-7P

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172485-52-8P 172485-53-9P 172485-54-0P
     172485-56-2P 172485-58-4P 172485-59-5P
     172485-60-8P 172485-61-9P 172485-62-0P
     172485-63-1P 174350-42-6P 174350-62-0P
     174350-66-4P 174900-23-3P 174900-24-4P
     177788-58-8P 177788-59-9P 177788-60-2P
     177788-61-3P 177788-62-4P 177788-64-6P
    177788-65-7P 177788-66-8P 177788-70-4P
    177788-71-5P 177788-72-6P 177788-77-1P
    177788-79-3P 177788-80-6P 177788-81-7P
    177788-82-8P 177788-83-9P 177788-84-0P
    177788-85-1P 177788-86-2P 177788-87-3P
    177788-88-4P 177788-89-5P 177788-90-8P
    177788-91-9P 177788-92-0P 177788-93-1P
    177788-94-2P 177788-95-3P 177788-96-4P
    177788-97-5P 177788-98-6P 177788-99-7P
    177789-00-3P 177789-01-4P 177789-03-6P
    177789-09-2P 177789-10-5P 177789-11-6P
    177789-12-7P 177789-13-8P 177789-14-9P
    177932-82-0P 179530-41-7P 179530-42-8P
    RL: BPR (Biological process); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study);
    PREP (Preparation); PROC (Process); USES (Uses)
        (cyclic hexapeptide somatostatin analogs for radiodiagnosis
       and radiotherapy)
L38 ANSWER 16 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                       1996:155533 HCAPLUS
DOCUMENT NUMBER:
                        124:212160
TITLE:
                       Monoamine, diamide, thiol-containing metal chelating
                       agents
INVENTOR(S):
                       Mcbride, William; Dean, Richard T.
PATENT ASSIGNEE(S):
                     Diatech, Inc., USA
SOURCE:
                       PCT Int. Appl., 64 pp.
                       CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 44
PATENT INFORMATION:
    PATENT NO. KIND DATE
                                        APPLICATION NO. DATE
    _____
    WO 9533497
                    A1 19951214
                                        WO 1995-US6914 19950601
        W: AU, BR, CA, CN, JP, KR
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    CA 2191951 AA
                           19951214
                                    CA 1995-2191951 19950601
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AU 9526944
                                        AU 1995-26944
                                                         19950601
                     Α1
                          19960104
    AU 707040
                     В2
                          19990701
    BR 9507917
                     Α
                          19970812
                                         BR 1995-7917
                                                         19950601
                                         CN 1995-194356
    CN 1158090
                     Α
                          19970827
                                                         19950601
    CN 1093424
                     В
                          20021030
                    A2
                         19971105
    EP 804252
                                        EP 1995-922159
                                                        19950601
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE
                    Т2
                          19980210
                                         JP 1995-501181 19950601
    JP 10501531
                                                         19950602
    ZA 9504548
                     Α
                          19960315
                                         ZA 1995-4548
PRIORITY APPLN. INFO.:
                                      US 1994-253973 A 19940603
                                                    W 19950601
                                      WO 1995-US6914
OTHER SOURCE(S):
                       MARPAT 124:212160
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AB The invention relates to reagents useful in prepg. radiolabeled diagnostic and therapeutic agents (radiopharmaceuticals). Specifically, the

invention provides such reagents that are monoamine, diamide, and thiol-contg. metal chelators. Methods of making such reagents, and methods of using the radiopharmaceuticals produced therefrom are also

provided.

IT 161982-27-0DP, technetium 99 complexes 161982-55-4DP, technetium 99 complexes 174350-42-6DP, technetium 99 complexes 174350-57-3DP, technetium 99 complexes 174350-61-9DP, technetium 99 complexes 174350-62-0DP, technetium 99 complexes 174350-63-1DP, technetium 99 complexes 174350-64-2DP, technetium 99 complexes

RL: PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (monoamine, diamide, and thiol-contg. metal chelating agents as

radiopharmaceuticals)

ΙT 161982-27-0P 161982-55-4P 174350-42-6P 174350-57-3P 174350-61-9P 174350-62-0P 174350-63-1P 174350-64-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(monoamine, diamide, and thiol-contg. metal chelating agents as radiopharmaceuticals)

IT 174350-66-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (monoamine, diamide, and thiol-contg. metal chelating agents as radiopharmaceuticals)

ΙT 51110-01-1, Somatostatin

RL: BSU (Biological study, unclassified); BIOL (Biological study) (radiopharmaceuticals binding to; monoamine, diamide, and thiol-contg. metal chelating agents as radiopharmaceuticals)

ANSWER 17 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:148249 HCAPLUS

DOCUMENT NUMBER: 124:261669

TITLE: Somatostatin Receptor-Binding Peptides

Labeled with Technetium-99m : Chemistry and Initial

Biological Studies

AUTHOR(S): Pearson, Daniel A.; Lister-James, John; McBride,

William J.; Wilson, David M.; Martel, Lawrence J.; Civitello, Edgar R.; Taylor, John E.; Moyer, Brian R.;

Dean, Richard T.

CORPORATE SOURCE: Department of Chemistry, Diatech Inc., Londonderry,

NH, 03053, USA

SOURCE: Journal of Medicinal Chemistry (1996), 39(7), 1361-71

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

The synthesis of peptides which possess a high affinity for the somatostatin receptor and contain a chelator for the radionuclide technetium-99m is described. The target compds. were designed such that they would form stable, oxotechnetium(V) chelate complexes in which the site of metal coordination was well defined and remote from the receptor-binding region. Oxorhenium(V) chelate complexes of these peptides were prepd. as nonradioactive surrogates for the technetium complexes. Peptide oxorhenium complexes and Tc-99m complexes eluted closely upon HPLC anal. The receptor-binding affinities of both the free and rhenium-coordinated species were measured in vitro. The binding affinities of the free peptides (Ki's in the 0.25-10 nM range) compared favorably with [DTPA] octreotide (Ki = 1.6 nM), which, as the indium-111 complex, is already approved for somatostatin-type receptor (SSTR) -expressing tumor imaging in the United States and Europe. Furthermore, the rhenium-coordinated peptides had binding affinities which, in many cases, were higher than those of the corresponding free peptides, with several complexes having Ki = 0.1 nM. Some of the more potent SSTR-binding peptides were labeled with technetium-99m and assessed in an in vivo study with tumor-bearing rats. The 99mTc-labeled peptides

prepd. in this study should be useful as SSTR-expressing tumor-imaging

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agents due to their high SSTR-binding affinities, ease of prepn., and,
    because they are low mol. wt. peptides, expected pharmacokinetics
    characterized by rapid tracer excretion from the body resulting in
    high-contrast images.
    161889-37-8P 161982-27-0P 161982-29-2P
ΙT
    161982-30-5P 161982-57-6P 161982-58-7P
    161982-59-8P 161982-60-1P 174350-62-0P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL
     (Biological study); PREP (Preparation); RACT (Reactant or reagent)
        (prepn. and initial biol. studies of somatostatin
       receptor-binding peptides complexed with oxorhenium(V) and
       oxotechnetium-99m)
    174900-25-5P 174900-26-6P 174900-27-7P
IT
    174900-28-8P 174900-29-9P 174900-30-2P
    174900-31-3P 174900-32-4P 174900-33-5P
    174900-34-6P 174900-35-7P 174900-36-8P
     174900-37-9P 174900-38-0P 174900-39-1P
     174900-40-4P 174900-41-5P 174900-42-6P
     174900-43-7P 174900-44-8P 174900-45-9P
    174900-46-0P 174900-47-1P 174900-48-2P
    174900-49-3P 174900-50-6P 174900-51-7P
    174900-52-8P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation)
        (prepn. and initial biol. studies of somatostatin
        receptor-binding peptides complexed with oxorhenium(V) and
        oxotechnetium-99m)
     172485-51-7P 172485-52-8P 172485-53-9P
ΙT
     172485-54-0P 172485-56-2P 172485-57-3P
     172485-58-4P 172485-61-9P 174900-23-3P
     174900-24-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (prepn. and initial biol. studies of somatostatin
        receptor-binding peptides complexed with oxorhenium(V) and
        oxotechnetium-99m)
L38 ANSWER 18 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
                        1996:147789 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         124:197258
                         Technetium-99m-labeled peptides for imaging
TITLE:
                         Dean, Richard T.; Buttram, Scott; McBride, William;
INVENTOR(S):
                         Lister-James, John; Civitello, Edgar R.
                         Diatech, Inc., USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 42 pp.
SOURCE:
                         CODEN: PIXXD2
                         Patent
DOCUMENT TYPE:
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 44
PATENT INFORMATION:
                                          APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
                                           _____
                                           WO 1995-US7017 19950601
                · A1
                            19951214
     WO 9533498
         W: AU, BR, CA, CN, JP, KR
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                     US 1994-253678 19940603
                            19991207
     US 5997844
                     Α
                                                           19950601
                                           AU 1995-27783
     AU 9527783
                       Α1
                            19960104
                     В2
     AU 697048
                            19980924
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EP 1995-922946

19950601

19970319

A1

EP 762901

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R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     JP 10501241
                    Т2
                           19980203
                                       JP 1995-501223 19950601
                                       US 1994-253678 A 19940603
PRIORITY APPLN. INFO.:
                                                      B2 19910208
                                       US 1991-653012
                                       US 1993-92355
                                                       A2 19930715
                                       WO 1995-US7017
                                                      W 19950601
                        MARPAT 124:197258
OTHER SOURCE(S):
    Radiolabeled peptides and methods for producing them are disclosed.
AB
     Specifically, the invention relates to peptides, methods, and kits for
    making the peptides, as well as methods for using such peptides to image
    sites in a mammalian body labeled with technetium-99m via a
     radiolabel-binding moiety covalently attached to a specific binding
    peptide via an amino acid side-chain of the peptide. Peptide sequences
    are included.
    161889-37-8DP, technetium-99m-radiolabeled 161982-57-6DP
IΤ
     , technetium-99m-radiolabeled 161982-59-8DP,
    technetium-99m-radiolabeled
    RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (radiolabeled peptides for imaging and their prepn.)
ΙT
    51110-01-1, Somatostatin
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (receptor, tumor expressing; radiolabeled peptides for imaging and
       their prepn.)
L38 ANSWER 19 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                        1996:137633 HCAPLUS
DOCUMENT NUMBER:
                        124:169545
TITLE:
                        Somatostatin receptor-binding peptide-metal
                        chelate conjugates for diagnosis and therapy
                        Dean, Richard
INVENTOR(S):
                      Diatech, Inc., USA
PATENT ASSIGNEE(S):
                        PCT Int. Appl., 48 pp.
SOURCE:
                        CODEN: PIXXD2
                        Patent
DOCUMENT TYPE:
                        English
LANGUAGE:
FAMILY ACC. NUM. COUNT: 44
PATENT INFORMATION:
                   KIND DATE APPLICATION NO. DATE
    PATENT NO.
                                        WO 1995-US6034 19950512
                           19951123
    WO 9531221
                     A1
        W: AU, CA, CN, JP
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    US 5783170
                A
                           19980721 US 1994-241625 19940512
                                                         19950512
                                         AU 1995-25500
    AU 9525500
                      A1
                           19951205
    AU 708797
                      B2
                           19990812
                                         EP 1995-919827
                                                        19950512
    EP 759786
                     A1
                           19970305
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                                          JP 1995-529821 19950512
                     T2 19980113
     JP 10500411
                                       US 1994-241625 A 19940512
PRIORITY APPLN. INFO.:
                                       US 1991-807062 A2 19911127
                                       WO 1995-US6034
                                                     W 19950512
                        MARPAT 124:169545
OTHER SOURCE(S):
    This invention relates to diagnostic and radiodiagnostic agents, including
     radiolabeled scintigraphic imaging agents, and therapeutic and
     radiotherapeutic agents. The invention provides such agents and reagents
     for prepg. such agents, and methods for producing and using such reagents.
     Specifically, the invention provides radiolabeled imaging agents and
     nonradioactively labeled imaging agents for imaging sites in a mammalian
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body and reagents for prepg. these imaging agents. The invention also provides radiolabeled therapeutic agents, as well as nonradioactively labeled therapeutic agents, and reagents and methods for prepg. these

agents. The agents and reagents provided comprise a specific binding peptide, covalently linked to a metal ion-complexing moiety. Reagents, methods and kits for making such reagents, methods for labeling such reagents, and methods for using such labeled reagents are provided. Prepn. of cyclic peptides of the invention is described, as are their labeling with 99mTc and in vivo imaging of somatostatin receptor-contg. tumors.

IT 51110-01-1, Somatostatin

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(receptor; somatostatin receptor-binding peptide-metal

chelate conjugates for diagnosis and therapy)
IT 161889-37-8D, metal ion-complexing moiety-linked
161982-57-6D, metal ion-complexing moiety-linked
161982-59-8D, metal ion-complexing moiety-linked
161982-60-1D, metal ion-complexing moiety-linked

172485-52-8D, metal ion-complexing molety-linked 172485-53-9D, metal ion-complexing molety-linked 172485-53-9D, metal ion-complexing molety-linked

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(somatostatin receptor-binding peptide-metal chelate

conjugates for diagnosis and therapy)

L38 ANSWER 20 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:38230 HCAPLUS

DOCUMENT NUMBER: 124:169544

TITLE: Technetium-99m-labeled peptides as scintigraphic

imaging agents

INVENTOR(S): Dean, Richard T.; Lister-James, John; Mcbride, William

PATENT ASSIGNEE(S): Diatech, Inc., USA SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 44

PATENT INFORMATION:

	PATENT NO.	KIND D	DATE		APPLICATION NO).	DATE			
		A1 1			WO 1995-US5340)	19950501			
	•			FR, G	B, GR, IE, IT,	LU,	MC, NL,	PT,	SE	
	CA 2189420	AA 1	9951109	•	CA 1995-218942	20	19950501			
	AU 9524633	A1 1	9951129		AU 1995-24633		19950501			
	AU 704460	B2 1	9990422		•					•
	EP 772459	A1 1	9970514		EP 1995-918875	õ	19950501			
	EP 772459	B1 2	20030319							
	R: AT, BE	CH, DE,	DK, ES,	FR, G	B, GR, IE, IT,	LI,	LU, MC,	NL,	PT,	SE
	CN 1152881		.9970625		CN 1995-19373	7	19950501			
	CN 1087955		20020724							
	JP 09512555		9971216		JP 1995-528440		19950501			
	AT 234639		20030415		AT 1995-918875		19950501			
	ZA 9503494		9960628		ZA 1995-3494		19950502			
PRI	ORITY APPLN. INF	·O.:	•		1994-236402					
				WC	1995-US5340	W	19950501			

OTHER SOURCE(S): MARPAT 124:169544

AB A scintigraphic imaging agent for imaging sites in a mammalian body comprises a specific binding compd. of mol. wt. <10,000 covalently linked to a radiolabel-complexing peptide R1COA1A2Z [R1 = C1-4 alkyl, covalent linkage to specific binding compd.; A1, A2 = amino acid not contg. an SH group; Z = SH-contg. group selected from Cys, homocysteine, isocysteine, penicillamine, HSCH2CH2NH2, HSCH2CH2CH2NH2; if Z contains a CO group, it is linked to OH, (substituted) amino, amino acid, or (cyclic) peptide] or YA2A1NHR2 [Y = Z above, linked (if any of 1st 4 compds.) to H, amino acid, or (cyclic) peptide; A1, A2 as above; R2 = H, C1-4 alkyl, covalent linkage

to specific binding compd.]. The radiolabel (e.g. 99mTc)-complexing moiety is covalently linked to the specific binding compd. through R1, R2, a sidechain group of A1 or A2, or the NH2 or CO2H group of Cys, homocysteine, isocysteine, or penicillamine. These compds., owing to their low mol. wt., are not likely to be immunogenic and are cleared rapidly from the vasculature, allowing for rapid imaging and diagnosis. The reagent may alternatively contain a polyvalent linking moiety covalently linked to multiple specific binding compds. and multiple radiolabel-complexing peptides. Thus, 99mTc-labeled HSCH2CO-GGGRALVDTLKFVTQAEGAK-NH2 was injected into rabbits which had been fed a cholesterol-rich diet for imaging of atherosclerotic plaques with a .gamma. camera.

IT 51110-01-1, Somatostatin

RL: BSU (Biological study, unclassified); BIOL (Biological study) (receptors; technetium-99m-labeled peptides as scintigraphic imaging agents)

IT 161889-37-8D, technetium-labeled 161982-57-6D, technetium-labeled 161982-59-8D, technetium-labeled 172485-51-7D, technetium-labeled 172485-52-8D, technetium-labeled 172485-53-9D, technetium-labeled 172485-55-1D, technetium-labeled 172485-55-1D, technetium-labeled 172485-56-2D, technetium-labeled 172485-57-3D, technetium-labeled 172485-58-4D, technetium-labeled 172485-59-5D, technetium-labeled 172485-60-8D, technetium-labeled 172485-61-9D, technetium-labeled 172485-62-0D, technetium-labeled 172485-63-1D, technetium-labeled RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (technetium-99m-labeled peptides as scintigraphic imaging agents)

L38 ANSWER 21 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1995:465577 HCAPLUS

DOCUMENT NUMBER:

122:234388

TITLE:

SOURCE:

Radiolabeled somatostatin-derived peptides

for imaging and therapeutic uses

INVENTOR(S):

Dean, Richard T.; McBride, William; Lister-James, John

PATENT ASSIGNEE(S):

Diatech, Inc., USA PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

: 44

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
	A1 19950105 CA, JP, US	WO 1994-US6274	19940603
RW: AT, I	BE, CH, DE, DK, ES,	FR, GB, GR, IE, IT, LU,	MC, NL, PT, SE
US 6017509	A 20000125	US 1993-92355	19930715
AU 9470990	A1 19950117	AU 1994-70990	19940603
AU 701083	B2 19990121		
EP 720621	A1 19960710	EP 1994-920076	19940603
EP 720621	B1 20010207		
R: AT,	BE, CH, DE, DK, ES,	FR, GB, GR, IE, IT, LI,	, NL, SE
AT 199089		AT 1994-920076	
		CA 1994-2167281	19940603
US 6051206	A 20000418		19960506
PRIORITY APPLN. II	NFO.:	US 1993-92355 A	
		US 1991-807062 A2	
•			19930623
	MADDAM 100.0		19940603

OTHER SOURCE(S):

MARPAT 122:234388

Therapeutic reagents and peptides, including radiotherapeutic reagents and AB peptides, radiodiagnostic reagents and peptides, and methods for producing labeled radiodiagnostic agents, are disclosed. Specifically, the invention relates to cyclic peptide derivs. and analogs of somatostatin, and embodiments of such peptides radiolabeled with a radioisotope, as well as methods and kits for making, radiolabeling, and using such peptides for radiodiagnostic and radiotherapeutic purposes. The invention specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with technetium-99m and uses thereof as scintigraphic imaging agents. The invention also specifically relates to cyclic peptide derivs. and analogs of somatostatin radiolabeled with cytotoxic radioisotopes (e.g. 186Re, 188Re) for use as radiotherapeutic agents. Methods and kits for making, radiolabeling, and using such peptides diagnostically and therapeutically in a mammalian body are also provided. Data for binding of the analogs to somatostatin receptors is included, as is use in imaging of somatostatin receptor-expressing tumors. IT 161982-32-7 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (prepn. and use of radiolabeled somatostatin-derived peptides for imaging and therapeutic uses) 161982-55-4DP, technetium-99m complexes 161982-55-4P ΙT 161982-56-5DP, technetium-99m complexes 161982-56-5P 161982-57-6DP, technetium-99m complexes 161982-57-6P 161982-58-7DP, technetium-99m complexes 161982-58-7P 161982-59-8DP, technetium-99m complexes 161982-59-8P 161982-60-1DP, technetium-99m complexes 161982-60-1P RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and use of radiolabeled somatostatin-derived peptides for imaging and therapeutic uses) IT 51110-01-1D, Somatostatin, analogs 161982-27-0 161982-27-0D, radioisotope complexes 161982-28-1 161982-28-1D, radioisotope complexes 161982-29-2 161982-29-2D, radioisotope complexes 161982-30-5 161982-30-5D, radioisotope complexes RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (prepn. and use of radiolabeled somatostatin-derived peptides for imaging and therapeutic uses) L38 ANSWER 22 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN 1995:452298 HCAPLUS ACCESSION NUMBER: 124:49695 DOCUMENT NUMBER: TITLE: Somatostatin derivatives and their radiolabelled products Mcbride, William; Dean, Richard T. INVENTOR(S): Diatech, INc., USA PCT Int. Appl., 58 pp. PATENT ASSIGNEE(S): SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 44 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE _____ WO 9503330 A1 19950202 WO 1994-US8335 19940721 W: AU, CA, JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 19930721 US 5620675 19970415 US 1993-95760 Α AU 1994-75506 19940721 AU 9475506 Α1 19950220

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AU 684823
                       B2
                            19980108
     JP 09501419
                       Т2
                            19970210
                                           JP 1995-505359
                                                            19940721
     EP 804481
                       A1
                            19971105
                                           EP 1994-925686
                                                            19940721
     EP 804481
                       В1
                            20030416
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, IE
     AT 237637
                            20030515
                       E
                                           AT 1994-925686 19940721
     US 6241965
                       В1
                            20010605
                                           US 1996-586670
                                                            19960422
PRIORITY APPLN. INFO.:
                                        US 1993-95760 A 19930721
                                        US 1992-902935
                                                         A2 19920623
                                        WO 1994-US8335 W 19940721
OTHER SOURCE(S):
                        MARPAT 124:49695
     Linear peptide derivs. and analogs of somatostatin radiolabeled
     with 99mTc are useful as scintigraphic imaging agents. Linear peptide
     derivs. and analogs of somatostatin radiolabeled with cytotoxic
     radioisotopes such as 186Re and 188Re are useful as radiotherapeutic
     agents. Methods and kits for making, radiolabeling, and using such
     peptides diagnostically and therapeutically in a mammal are provided.
IT
     51110-01-1D, Somatostatin, analogs 161889-37-8D
     , complexes with radioelements
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (somatostatin derivs. and radiolabeled products for imaging
        and therapy)
L38 ANSWER 23 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                         1992:470317 HCAPLUS
DOCUMENT NUMBER:
                         117:70317
TITLE:
                         Metastable fragmentation of somatostatin-14
                         (SS-14) and a series of SS-14 analogs formed with
                         liquid secondary ion mass spectrometry: observation
                         of fragment ions which involve unsymmetric disulfide
                         bridge cleavage concomitant with peptide chain
                         cleavage
                         Craig, A. Grey; Rivier, Jean E.
AUTHOR(S):
CORPORATE SOURCE:
                        Salk Inst., San Diego, CA, 92138-9216, USA
SOURCE:
                         Organic Mass Spectrometry (1992), 27(5), 549-59
                         CODEN: ORMSBG; ISSN: 0030-493X
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     Somatostatin-14 (I) and several analogs were analyzed using liq.
     secondary ion mass spectrometry (LSIMS). The obsd. isotope distributions
     showed low levels of reduced I. The daughter-ion spectra of the
     protonated mol. ions of I and several analogs contained a no. of
     metastable fragment ions. Two fragments in these spectra were assigned to
     cleavage of the peptide chain concomitant with unsym. cleavage of the
     disulfide bridge. Single alanine-substituted analogs of I were used to
     confirm these assignments, while single D isomer-substituted analogs of I
     were used to investigate the dependence of the cleavages on conformation.
     40958-31-4, Somatostatin (sheep reduced)
ΙT
     RL: PRP (Properties)
        (in situ formation and liq. secondary ion mass spectra of)
IT
     142570-89-6
     RL: PRP (Properties)
        (in situ redn. and liq. secondary ion mass spectra of, unsym. disulfide
        cleavage in)
IT
     142570-90-9 142570-91-0 142570-92-1
     142570-93-2 142570-94-3 142570-95-4
     142570-96-5 142570-97-6 142570-98-7
     142570-99-8 142571-00-4 142632-54-0
     142632-55-1 142632-56-2 142632-57-3
     142632-58-4 142632-59-5
     RL: PRP (Properties)
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Audet 734583-claim 5

(liq. secondary ion mass spectra of, unsym. disulfide cleavage in)

ANSWER 24 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1985:535323 HCAPLUS

DOCUMENT NUMBER:

103:135323

TITLE:

New analogs of somatostatin with unexpected

effects in vivo on insulin basal secretion in the rat

(1)

AUTHOR(S):

Diaz, Joseph; Cazaubon, Catherine; Demarne, Henri; Gagnol, Jean Pierre; Guegan, Remy; Muneaux, Yvette; Perreaut, Pierre; Richaud, Jean Paul; Vedel, Michel; Roncucci, Romeo

CORPORATE SOURCE:

SOURCE:

Cent. Rech., Clin-Midy/Sanofi, Montpellier, 34082, Fr. European Journal of Medicinal Chemistry (1985), 20(3),

219-27

CODEN: EJMCA5; ISSN: 0223-5234

DOCUMENT TYPE:

Journal English

LANGUAGE:

Twenty analogs of somatostatin were synthesized by the alternating soln./solid-phase procedure. The peptide analogs contg. taurine aza-alanine or D-amino acids as well as multiple deletions were examd. for the selective inhibition of insulin [9004-10-8] or glucagon [9007-92-5] release. The biol. activities were evaluated in vivo in the rat by measuring the effects of the modified somatostatin mols. on basal secretion of insulin and glucagon in the portal vein. Although some selective analogs were found, a few of them having a taurine or an aza-alanine residue in their structure caused an increase of insulin secretion. This unexpected phenomenon is unexplained and under

ΤТ 38916-34-6

investigation.

RL: BIOL (Biological study)

(glucagon and insulin secretion response to, mol. structure in relation

89318-97-8P 89343-24-8P 89343-46-4P IT

89343-47-5P 89343-48-6P 89343-49-7P

89343-54-4P 89343-89-5P 89343-90-8P

89343-91-9P 89343-92-0P 89343-93-1P

98154-87-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and glucagon and insulin secretion response to, mol. structure in relation to)

IT **51110-01-1DP**, analogs

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, and their effect on glucagon and insulin secretion, mol. structure in relation to)

L38 ANSWER 25 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1985:215394 HCAPLUS

DOCUMENT NUMBER:

AUTHOR(S):

102:215394

TITLE:

Somatostatin analogs: correlation of

receptor affinity with inhibition of cyclic AMP

formation in pancreatic acinar cells

Taparel, D.; Susini, C.; Esteve, J. P.; Diaz, J.;

Cazaubon, C.; Vaysse, N.; Ribet, A. INSERM, Toulouse, 31054, Fr.

CORPORATE SOURCE:

SOURCE:

Peptides (New York, NY, United States) (1985), 6(1),

109-14

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

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H-Cys-AzaAla-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-Cys-OH
```

AB Cyclic somatostatin [38916-34-6] inhibited secretin [1393-25-5]-stimulated cAMP [60-92-4] formation in pancreatic acinar cells. The inhibition was only partial. Maximal inhibition reached apprx.50%. Somatostatin analogs tested inhibited secretin-stimulated cAMP formation with a lower potency than somatostatin. I [89343-24-8] was an antagonist of somatostatin in inhibiting secretin-stimulated cAMP. Analogs inhibited the binding of 125I-labeled [Tyr11]somatostatin to pancreatic acini. There was a good correlation between concn. for inhibiting secretin-stimulated cAMP by 50% and receptor binding affinities.

IT 38916-34-6 61950-59-2 75037-27-3 89318-97-8 89343-24-8 89343-46-4 89343-47-5 89343-89-5 89343-90-8 96608-45-6 96608-46-7 96608-47-8 96608-48-9

RL: BIOL (Biological study)

(cAMP formation inhibition by and receptor binding of, in pancreas, mol. structure in relation to)

L38 ANSWER 26 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN .

ACCESSION NUMBER:

1984:473083 HCAPLUS

DOCUMENT NUMBER:

101:73083

TITLE:

An improved procedure for peptide cyclization

AUTHOR(S):

Brady, Stephen F.; Paleveda, William J.; Arison, Byron H.; Freidinger, Roger M.; Nutt, Ruth F.; Veber, Daniel

F

CORPORATE SOURCE:

Merck Sharp and Dohme Res. Lab., West Point, PA,

19486, USA

SOURCE:

Pept.: Struct. Funct., Proc. Am. Pept. Symp., 8th (1983), 127-30. Editor(s): Hruby, Victor J.; Rich,

Daniel H. Pierce Chem. Co.: Rockford, Ill.

CODEN: 51KAAK Conference

DOCUMENT TYPE:

English

LANGUAGE:

GI For diagram(s), see printed CA Issue.

AB Cyclization of H-D-Trp-L-Lys(R)-L-Val-L-Phe-L-MeAla-L-Tyr-OH [I; R = PhCH2O2C (Z)] by Ph2P(O)N3 was studied in the presence of various bases. Replacement of Et3N by NaHCO3 or K2HPO4 resulted in highly efficient cyclization to .alpha.-product II (R = Z). Less than 0.3% racemization at tyrosine was obsd. under optimal conditions. Similar cyclization. of I (R = H) in the presence NaHCO3 gave somatostatin analog II (R = H) 26, .epsilon.-product III 21, and dimeric products 41%; with K2HPO4, dimeric products were virtually eliminated but the selectivity for II (R = H) was lower.

IT 91297-72-2P

L38 ANSWER 27 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1984:192280 HCAPLUS

DOCUMENT NUMBER:

100:192280

TITLE:

Taurine-substituted **somatostatin** analogs and medicines containing them for treating diabetes Diaz, Joseph; Vedel, Michel; Gagnol, Jean Pierre

INVENTOR(S):

Sanofi, Fr. Fr. Demande, 32 pp.

PATENT ASSIGNEE(S):

CODEN: FRXXBL

SOURCE:

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DOCUMENT TYPE: Patent LANGUAGE: French FAMILY ACC. NUM. COUNT: 1
```

PATENT INFORMATION:

GI For diagram(s), see printed CA Issue.

AB Eight taurine-contg. somatostatin analogs were prepd. as antidiabetics. Thus, Boc-Ala-Gly-Cys(Acm)-Lys(Msc)-Asn-Phe-Tau-Phe-OH (I; Tau = NHCH2CH2SO2, Boc = Me3CO2C, Acm = CH2NHAc, Msc = CO2CH2CH2SO2Me) was coupled with H-Trp-Lys(Msc)-Thr-Phe-Thr-Ser-Cys(Acm)-OPse (II, Pse = CH2CH2SO2CH2C6H4N:NPh-p) by DCC/1-hydroxybenzotriazole to give Boc-Ala-Gly-Cys(Acm)-Lys(Msc)-Asn-Phe-Tau-Phe-Trp-Lys(Msc)-Thr-Phe-Thr-Ser-Cys(Acm)-OPse, which was Boc-deblocked by CF3CO2H and then Msc- and Pse-deblocked to give H-Ala-Gly-Cys(Acm)-Lys-Asn-Phe-Tau-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Cys(Acm)-OH. The latter was Acm-deblocked by AgNO3 and then cyclized by oxidn. to give somatostatin analog III. I and II were prepd. by conventional soln. methods. The title analogs inhibit the secretion of insulin and glucagon without affecting digestive secretion.

IT 89344-29-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and deblocking-oxidative cyclization of)

IT 89343-90-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and glucagon release-inhibiting activity of)

IT 51110-01-1DP, taurine-contg. analogs

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and insulin and glucagon release-inhibiting activities of)

IT 89343-91-9P 89343-93-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and insulin and glucagon release-inhibiting activity of)

IT 89306-52-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and oxidative cyclization of)

IT 89344-12-7P 89344-26-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and partial deblocking of)

IT 89343-89-5P 89343-92-0P 89343-95-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of)

L38 ANSWER 28 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:175295 HCAPLUS

DOCUMENT NUMBER: 100:175295

TITLE: Azaalanine-substituted somatostatin analogs

and medicaments containing them, used for the

treatment of diabetes

INVENTOR(S): Vedel, Michel; Diaz, Joseph; Cazaubon, Catherine

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 34 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

FR 2523126 A1 19830916 FR 1982-3853 19820308

PRIORITY APPLN. INFO: FR 1982-3853 19820308

OTHER SOURCE(S): CASREACT 100:175295

GI For diagram(s), see printed CA Issue.

AB Somatostatin analogs I (AzaA = NHNMeCO; R = H, amino acid or dipeptide residue; X = D- or L-Cys; X1 = D- or L-Trp; X2 = Thr, D-Phe, null; X3 = Ser, null) and their salts were prepd. Thus, Boc-Ala-Gly-Cys(Acm)-AzaA-Phe-Phe-Trp-Lys(Msc)-Thr-Phe-Thr-Ser-Cys(Acm)-OPsc [Boc = Me3CO2C, Acm = CH2NHAc, Msc = CO2CH2CH2SO2Me, Psc = CH2CH2SO2CH2C6H4(N:NPh)-p] was prepd. by conventional soln. methods and then it was Boc-deblocked by CF3CO2H and then Msc- and Psc-deblocked to give H-Ala-Gly-Cys(Acm)-AzaA-Phe-Phe-Trp-Lys-Thr-Phe-Thr-Ser-Cys(Acm)-OH. The latter was Acm-deblocked and cyclized by oxidn. with K3[Fe(CN)6] to give somatostatin analog II. II inhibited the secretion of insulin.

IT 89318-95-6P 89343-12-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and deblocking of)

IT 89318-96-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and deprotection-cyclization of)

IT 89318-97-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and insulin release-inhibiting activity of)

IT 89318-98-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and oxidative cyclization of)

IT 89343-24-8P 89343-46-4P

IT 51110-01-1DP, azaalanine-contg. analogs

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as antidiabetics)

IT 9002-72-6

RL: RCT (Reactant); RACT (Reactant or reagent) (secretion of, azaalanine somatostatin analogs effect on)

L38 ANSWER 29 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:139624 HCAPLUS

DOCUMENT NUMBER: 100:139624

TITLE: Somatostatin analogs with modified

biological activity and medicaments containing them

INVENTOR(S): Diaz, Joseph; Muneaux, Yvette; Roncucci, Romeo

PATENT ASSIGNEE(S): Sanofi, Fr.

SOURCE: Fr. Demande, 24 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2523125	A1	19830916	FR 1982-3852	19820308

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PRIORITY APPLN. INFO.:
                                            FR 1982-3852
  OTHER SOURCE(S):
                                                                 19820308
                            CASREACT 100:139624
       For diagram(s), see printed CA Issue.
  GI
       Somatostatin analogs I (R = H or an amino acid or dipeptide
  AΒ
       residue; X = D- or L-Cys; X1 = Phe, D-Ala, null; X2 = L- or D-Phe or Gly;
       X3 = L- or D-Phe, null) and their salts were prepd. Thus,
       Boc-Cys(Acm)-D-Phe-Phe-D-Trp-Lys(Msc)-Thr-Phe-Phe-D-Cys(Acm)-OPse (Boc =
       Me3CO2C, Acm = AcNHCH2, Msc = MeSO2CH2CH2O2C, Pse = p-
       PhN:NC6H4CH2SO2CH2CH2) was prepd. by stepwise coupling in soln. and then
       it was Boc-deblocked by acidolysis and then Msc- and Pse-deblocked by base
       to give H-Cys(Acm)-D-Phe-Phe-D-Trp-Lys-Thr-Phe-Phe-D-Cys(Acm)-OH).
       latter was Acm-deblocked by AgNO3 and then cyclized by oxidn. with
       K3[Fe(CN)6] to give somatostatin analog II. The insulin-,
       glucagon-, and growth hormone-inhibiting activities of four I were
       compared with those of somatostatin.
  ΙT
       51110-01-1DP, analogs 89343-48-6P
       RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
       BIOL (Biological study); PREP (Preparation)
          (prepn. and inhibition by, of release of insulin, glucagon, and growth
 TΤ
      89343-47-5P 89343-49-7P 89343-54-4P
      RL: SPN (Synthetic preparation); PREP (Preparation)
          (prepn. of)
 ΙT
      9002-72-6
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (secretion of, somatostatin analog inhibition of)
 L38 ANSWER 30 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER:
                           1984:875 HCAPLUS
 DOCUMENT NUMBER:
                           100:875
 TITLE:
                           Somatostatin analogs: correlation between
                           receptor binding affinity and biological potency in GH
                           pituitary cells
AUTHOR(S):
                           Schonbrunn, Agnes; Rorstad, O. P.; Westendorf, Joanne
                          M.; Martin, Joseph B.
CORPORATE SOURCE:
                          Lab. Toxicol., Harvard Sch. Public Health, Boston, MA,
                          02115, USA
SOURCE:
                          Endocrinology (1983), 113(5), 1559-67
                          CODEN: ENDOÃO; ISSN: 0013-7227
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
     The relation between the apparent binding affinity and biol. potency of 19
     somatostatin (SRIF) analogs in GH4C1 cells was studied. Receptor
     binding and biol. activity were assayed under identical conditions. A
     good relation was obsd. over a 10,000-fold range between the receptor
     binding affinities and biol. potencies of SRIF analogs. Modification at
     the C- and N-terminal regions of the SRIF mol. had minimal effects on
     binding to the receptor or potency to inhibit prolactin release. However, substitution of residues 6 through 10 or redn. of the disulfide bond
     resulted in a 100-fold or greater decrease in both activities.
     N-terminal extended SRIF analogs, SRIF-28 [73032-94-7],
     [D-Trp22]SRIF-28 [77910-00-0], and SRIF-25 [76461-17-1], were all somewhat less potent than SRIF. These results strongly
     support the involvement of the characterized SRIF receptor in initiating
     the biol. actions of SRIF in GH4C1 cells and define the structural
     features of the SRIF mol. required for both receptor binding and
     activation.
    38916-34-6D, analogs 40958-31-4 58100-03-1
IT
    58959-53-8 58959-60-7 58959-62-9
    58959-64-1 58959-66-3 58959-68-5
    58959-70-9 58959-72-1 58976-46-8
    59481-23-1 59481-27-5 61518-61-4
```

72426-96-1 73032-94-7 76461-17-1

77910-00-0

AUTHOR(S):

RL: PRP (Properties)

(biol. potency and receptor binding affinity of, structure in relation

L38 ANSWER 31 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:416698 HCAPLUS

DOCUMENT NUMBER: 99:16698

TITLE: Assignments of the 270 MHz PMR spectrum of

somatostatin using pH titration, synthetic

analogs and double resonance difference spectroscopy

Buffington, Lynn A.; Garsky, Victor; Rivier, Jean;

Gibbons, William A.

CORPORATE SOURCE: Coll. Agric. Life Sci., Univ. Wisconsin, Madison, WI,

SOURCE: International Journal of Peptide & Protein Research

(1983), 21(3), 231-41 CODEN: IJPPC3; ISSN: 0367-8377

DOCUMENT TYPE: Journal LANGUAGE: English

The assignment procedure for the 270 MHz PMR spectrum in D20 of the 14

amino acid peptide hormone cyclic somatostatin [

38916-34-6], using a series of synthetic analogs in which a single amino acid residue was replaced by an alanine residue, is reported. principal methods used were pH titrn. and extensive double resonance expts. (difference scalar decouplings and nuclear Overhauser effect measurements).

38916-34-6 58959-54-9 58959-60-7 ΙT

58959-62-9 58959-64-1 58959-66-3

58959-68-5 58959-70-9 58959-72-1

61518-61-4

RL: BIOL (Biological study)

(NMR spectra)

ANSWER 32 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:406055 HCAPLUS

DOCUMENT NUMBER: 99:6055

TITLE: . Pharmaceutically active peptides

INVENTOR(S): Brown, Marvin R.; Rivier, Jean E. F.; Vale, Wylie W.,

PATENT ASSIGNEE(S): Salk Institute for Biological Studies, USA

SOURCE: U.S., 6 pp. Cont.-in-part of U.S. Ser. No. 602,259,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-			
US 4372884	Α	19830208	US 1976-675149	19760408
ZA 7604183	A	19780125	ZA 1976-4183	19760714
IL 50047	A1	19790531	IL 1976-50047	19760715
CA 1125282	A1	19820608	CA 1976-258076	19760729
DE 2634416	A1	19770224	DE 1976-2634416	19760730
AU 504070	B2	19791004	AU 1976-16436	19760730
BE 844837	A1	19761201	BE 1976-169517	19760803
FR 2320108	A1	19770304	FR 1976-23659	19760803
FR 2320108	B1	19800418		
DK 7603515	A	19770207	DK 1976-3515	19760804
CH 623806	Α	19810630	CH 1976-9945	19760804
FI 7602252	A	19770207	FI 1976-2252	19760805

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SE 7608794
                         Α
                              19770207
                                              SE 1976-8794
                                                               19760805
      NO 7602716
                         A
                              19770208
                                             NO 1976-2716
                                                               19760805
      GB 1551929
                        Α
                              19790905
                                             GB 1976-32686
                                                               19760805
      NL 7608764
                        Α
                              19770208
                                             NL 1976-8764
                                                               19760806
 PRIORITY APPLN. INFO.:
                                          US 1975-602259
                                                               19750806
                                          US 1976-675149
                                                               19760408
      Somatostatin analogs R-Cys(R1)-Lys-X-Phe-Phe-D-Trp-Lys-Thr-Phe-
      Thr-Ser-Cys(R2)-OH (R = aminoacyl, peptidyl, aliph., arom., or cyclic
      acyl; R1 = R2 = H, R1R2 = bond; X = Ala, Asn) were prepd. as inhibitors of
      the release of growth hormone (GH), glucagon, and insulin. Thus, D-Trp8-
      somatostatin (I) was prepd. by the solid-phase method. D-Ala2-
      somatostatin at 100 mg/100 g BW inhibited the release of GH with a
      relative potency of 103% compared to 100% for somatostatin.
      58959-53-8 58959-54-9 58959-60-7
      58959-62-9 58959-64-1 58959-66-3
      58959-68-5 58959-70-9 58959-72-1
      RL: RCT (Reactant); RACT (Reactant or reagent)
         (growth hormone release-inhibiting activity of)
 ΙT
      51110-01-1DP, analogs
      RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. and growth hormone release-inhibiting activity of)
 ΙT
      58976-46-8P 65375-80-6P 71459-94-4P
      85774-94-3P
      RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. of)
 ΙT
      9002-72-6
      RL: RCT (Reactant); RACT (Reactant or reagent)
         (release of, somatostatin analog inhibition of)
     ANSWER 33 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                          1983:210168 HCAPLUS
DOCUMENT NUMBER:
                          98:210168
TITLE:
                          Effects of different radioligands on the antigen
                          binding specificity of somatostatin antisera
AUTHOR(S):
                          Rorstad, O. P.
CORPORATE SOURCE:
                          Dep. Med., Univ. Calgary, Calgary, AB, T2N 4N1, Can.
SOURCE:
                          Journal of Immunoassay (1983), 4(1), 49-63
                          CODEN: JOUIDK; ISSN: 0197-1522
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
     The regions of the somatostatin (SRIF) [51110-01-1]
     mol. recognized by 5 antisera were systematically studied using 3
     radioligands (125I-labeled N-tyrosine-SRIF [58100-03-1], 125I-labeled 1-tyrosine-SRIF [59481-23-1], and 125I-labeled
     11-tyrosine-SRIF [59481-27-5] and SRIF analogs contg.
     sequential substitutions with alanine or tyrosine. Antisera produced in
     female sheep and moreso antisera(SB) produced in male sheep had N-terminal
     specificity when used with 125I-11-tyrosine-SRIF but central mol.
     specificity when studied with the 2 N-terminal radiolabeled analogs. The
     N-terminal and central specific populations of antibodies in antiserum SB
     were separable by immunoaffinity adsorption using immobilized
     1-tyrosine-SRIF. It is of practical significance that the same antiserum
     (SB) could be used with different radioligands to perform N-terminal and
     central specific RIAs. The central specific RIA detected SRIF-14 and
             [73032-94-7] on an approx. equimolar basis whereas the
     SRIF-28
    N-terminal specific RIA was selective for SRIF-14.
IT
     51110-01-1
     RL: BIOL (Biological study)
        (antiserum to, structure specificity of)
     40958-31-4 58100-03-1 58959-53-8
ΙT
     58959-60-7 58959-62-9 58959-64-1
     58959-66-3 58959-68-5 58959-70-9
```

58959-72-1 59481-23-1 59481-27-5 61518-61-4 72426-96-1 73032-94-7

RL: PROC (Process)

(somatostatin antiserum binding of, structure in relation to)

L38 ANSWER 34 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:191905 HCAPLUS

DOCUMENT NUMBER: 98:191905

TITLE: Structure-activity relationships of

somatostatin analogs in the rabbit ileum and

the rat colon

AUTHOR(S): Rosenthal, Linda E.; Yamashiro, Darrell J.; Rivier,

Jean; Vale, Wylie; Brown, Marvin; Dharmsathaphorn,

Kiertisin

CORPORATE SOURCE: Dep. Med., Univ. California, San Diego, La Jolla, CA,

92037, USA

SOURCE: Journal of Clinical Investigation (1983), 71(4), 840-9

CODEN: JCINAO; ISSN: 0021-9738

DOCUMENT TYPE: Journal LANGUAGE: English

Since cyclic somatostatin [38916-34-6] increases absorption of electrolytes and inhibits diarrhea in patients with endocrine tumors and short bowel syndrome, an attempt was made to develop a gut-specific somatostatin analog. Each amino acid in the somatostatin mol. was replaced with L-alanine, deleted, or substituted with its D-isomer. The potency of each analog to stimulate ion transport in the rabbit ileum was then detd. using the modified Ussing chamber technique. The results were compared to the ability of each analog to inhibit the stimulated release of growth hormone [9002-72-6] from cultured rat anterior pituitary cells and to inhibit the arginine-stimulated release of insulin [9004-10-8] and glucagon [9007-92-5] in the rat in vivo. Analogs that showed gut selectivity were then tested for their ion transport properties in the rat colon. Substitution with L-alanine or deletion of the amino acid at position 6, 7, 8, or 9 and deletion of 10-threonine produced analogs with ion transport properties reduced to <4% of somatostatin's action. The substitution also markedly reduced the ability of the compds. to inhibit the release of the growth hormone, insulin, and glucagon. Selectivity of intestinal ion transport was achieved by any one of the following alterations: L-alanine substitution at 11-phenylalanine, deletion of 11-phenylalanine, substitution with D-lysine at 4-lysine, or substitution with L-alanine at 4-lysine. These compds. had intestinal ion transport properties of 52, 34, 139, and 94%, resp., while demonstrating little or no inhibition of growth hormone, insulin or glucagon release. Thus, 6-phenylalanine, 7-phenylalanine, 8-tryptophan, and 9-lysine are required for the ion transport and other biol. actions of somatostatin, whereas 10-threonine serves as an essential spacer. Alteration at 11-phenylalanine or 4-lysine yields analogs that are selective for ion transport in the rabbit ileum and rat colon.

T 54518-51-3 54786-81-1 56649-54-8 56649-55-9 58383-28-1 58959-53-8 58959-54-9 58959-60-7 58959-62-9 58959-64-1 58959-66-3 58959-68-5 58959-70-9 58959-72-1 58976-46-8 59038-84-5 61425-92-1 61518-61-4 61557-10-6 64813-73-6 64813-74-7 64813-76-9 65330-61-2 66610-27-3 66610-29-5 66610-30-8 70952-37-3 72426-96-1 72426-97-2 72541-25-4 75105-83-8 75105-94-1 77891-43-1 79232-04-5 85734-73-2 85734-74-3

85734-76-5 85734-77-6 85734-78-7 85734-79-8 85734-82-3 85734-83-4

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85734-84-5 85734-85-6 85748-23-8
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
      (Uses)
         (electrolyte absorption stimulation by, in intestine)
      38916-34-6
 IT
      RL: BIOL (Biological study)
         (electrolyte transport by intestine in response to, structure in
         relation to)
 IT
      9002-72-6
      RL: BIOL (Biological study)
         (secretion of, somatostatin inhibition of, structure in
         relation to)
    ANSWER 35 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
 ACCESSION NUMBER:
                          1982:485661 HCAPLUS
 DOCUMENT NUMBER:
                          97:85661
 TITLE:
                          Characterization, regional distribution, and
                          subcellular distribution of 125I-Tyr1-
                          somatostatin binding sites in rat brain
AUTHOR (S):
                          Epelbaum, J.; Arancibia, L. Tapia; Kordon, C.;
                          Enjalbert, A.
CORPORATE SOURCE:
                         Cent. Paul Broca, INSERM, Paris, 75014, Fr.
SOURCE:
                          Journal of Neurochemistry (1982), 38(6), 1515-23
                         CODEN: JONRA9; ISSN: 0022-3042
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                         English
     125I-labeled Tyr-somatostatin [59481-23-1] binds
     reversibly, in a saturable manner, and with high affinity to membranes
     from rat brain. Kinetic and satn. data measured at equil. lead to KD
     values of 0.4 nM for cortical membranes. The binding was unaffected by 7
     neuropeptides and drugs unrelated structurally to somatostatin
     (SRIF) [51110-01-1] while native SRIF, Tyr1-SRIF, and
     D-Trp-D-Cys14-SRIF [61950-59-2] displace 125I-Tyr1-SRIFin a
     dose-dependent manner, with Ki of 0.23 nM, 0.90 nM, and 0.11 nM, resp.
     Binding sites for 125I-Tyr1-SRIF were found in 9 of 11 central structures;
     there was a correlation between binding capacity and endogenous SRIF
     levels measured by radioimmunoassay. In the structures contg. the most
     binding sites, the cortex and preoptic area, Scatchard anal. suggests a
     single population of sites with apparent affinities of 0.8 nM and 1.4 nM,
     resp. Subcellular fractionation of these 2 regions reveals that >60% of
     125I-Tyr1-SRIF specific binding of the homogenate is in the crude
     mitochondrial pellet (P2), which contains synaptosomes. When P2 is
     further fractionated on a discontinuous sucrose gradient, most of the
     initial P2 binding is recovered from membrane fractions. Each of 9 SRIF
     analogs, with a single alanine substitution, displaces 125I-Tyrl-SRIF
    binding on cortical membranes in the same order of potency as on
     adenohypophyseal membranes. Thus, SRIF binding sites are present in the
     rat brain, with kinetic characteristics comparable to those found in the
     adenohypophysis, and they provide a biochem. basis for the multiple
     functions of SRIF in brain.
     59481-23-1
    RL: BIOL (Biological study)
        (brain cortex membrane binding of, characterization of)
ΙT
    51110-01-1
    RL: BIOL (Biological study)
        (receptors for, of brain cortex membranes, characterization of)
IT
    58959-53-8 58959-54-9 58959-60-7
    58959-62-9 58959-64-1 58959-66-3
    58959-68-5 58959-70-9 61950-59-2
    72426-96-1
    RL: BIOL (Biological study)
       (somatostatin analog binding by brain membrane inhibition by)
```

```
L38 ANSWER 36 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
  ACCESSION NUMBER:
                           1982:401112 HCAPLUS
  DOCUMENT NUMBER:
                           97:1112
  TITLE: .
                           Somatostatin receptors on rat anterior
                           pituitary membranes
  AUTHOR(S):
                           Enjalbert, A.; Tapia-Arancibia, L.; Rieutort, M.;
                           Brazeau, P.; Kordon, C.; Epelbaum, J.
  CORPORATE SOURCE:
                           Cent. Paul Broca, INSERM, Paris, 75014, Fr.
  SOURCE:
                           Endocrinology (1982), 110(5), 1634-40
                           CODEN: ENDOÃO; ISSN: 0013-7227
  DOCUMENT TYPE:
                           Journal
  LANGUAGE:
                           English
       125I-labeled Tyr1-somatostatin (Tyr1-SRIF) [59481-23-1
       ] binds with high affinity to 1 class of sites in the rat anterior
       pituitary with a KD of 0.91 nM and a receptor concn. of 104.4 fmol/mg
       protein. This binding is saturable with respect to tissue concn. and is
       time-, temp.-, pH-, and Ca-dependent. It is also reversible as a function
      of time. The rates of assocn. and dissocn. were calcd. to be 5.98 .times.
      1207/M/min and 0.578/min, resp. Binding of [125I]iodo-Tyrl-SRIF is not
      inhibited by morphine, .beta.-endorphin, [D-Ala2]methionine-enkephalin,
      LH-RH, TRH, histidylproline diketopiperazine, neurotensin, substance P,
      bombesin, or VIP. In contrast, SRIF [51110-01-1], Tyrl-SRIF,
      and [D-Trp8, D-Cys14] SRIF [61950-59-2] displace
      [125I]iodo-Tyrl-SRIF binding with Ki values 0.10, 0.46, 0.05 nm, resp.
      The consts. of inhibition of a series of alanine monosubstituted analogs
      of SRIF are correlated with their biol. potency on growth hormone (GH)
      9002-72-6] secretion. Postnatal development patterns of
      [125I]iodo-Tyrl-SRIF binding sites follow the ability of SRIF to inhibit
      GH release. Thus, [1251]iodo-Tyr1-SRIF binding to adenohypophyseal
      membranes seems to reflect interaction with SRIF receptors on
      adenohypophyseal cells. Since biol. effects of the peptide have been
      reported on GH, TSH, and prolactin secretion, further studies are required
      to det. the cell types on which this binding occurs.
 ΙT
      61950-59-2
      RL: BIOL (Biological study)
         (Tyr1-somatostatin displacement from pituitary receptors by)
      58959-53-8 58959-54-9 58959-60-7
     58959-62-9 58959-64-1 58959-66-3
     58959-68-5 58959-70-9 72426-96-1
     RL: BIOL (Biological study)
        (growth hormone release inhibition by, receptor binding by anterior
        pituitary in relation to)
     51110-01-1D, analogs
ΙT
     RL: BIOL (Biological study)
        (growth hormone secretion inhibition by, receptor binding by anterior
        pituitary in relation to)
IT
     51110-01-1
     RL: BIOL (Biological study)
        (receptors for, of anterior pituitary gland)
     59481-23-1
IT
     RL: BIOL (Biological study)
        (receptors for, of anterior pituitary membranes) .
ΙT
     9002-72-6
     RL: BIOL (Biological study)
        (release of, somatostatin analogs inhibition of, anterior
        pituitary binding in relation to)
L38 ANSWER 37 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                        1981:604447 HCAPLUS
DOCUMENT NUMBER:
                         95:204447
TITLE:
                        Cyclooctapeptides and pharmaceutical preparations
```

thereof

```
Audet 734583-claim 5
    INVENTOR(S):
                              Sieber, Peter; Kamber, Bruno; Rink, Hans
    PATENT ASSIGNEE(S):
                              Ciba-Geigy A.-G., Switz.
    SOURCE:
                              Eur. Pat. Appl., 41 pp.
                              CODEN: EPXXDW
    DOCUMENT TYPE:
                              Patent
    LANGUAGE:
                              German
    FAMILY ACC. NUM. COUNT:
    PATENT INFORMATION:
         PATENT NO.
                         KIND DATE
                                              APPLICATION NO. DATE
                         ----
                                -----
        EP 31303
                                               -----
                          A2
                                19810701
                                               EP 1980-810395 19801215
                         A3
                                19811104
            R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
        DD 155985 C 19820721
        US 4358439
                                           DD 1980-226093
                                                                19801215
                          Α
                               19821109
        FI 8003935
                                               US 1980-216353
                          Α
                                                                19801215
                               19810622
        DK 8005436
                                               FI 1980-3935
                         A
                                                                19801217
                               19810622
                                              DK 1980-5436
        NO 8003883
                         Α
                               19810622
                                                               19801219
        AU 8065612
                                              NO 1980-3883
                         A1
                               19810625
                                                                19801219
       AU 535632
                                              AU 1980-65612
                         B2
                                                                19801219
                               19840329
        ZA 8007970
                         A
                               19820127
       ES 497974
                                              ZA 1980-7970
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                         A1
                               19820501
       JP 56097259
                                              ES 1980-497974
                                                               19801219
                         A2
  PRIORITY APPLN. INFO.:
                               19810805
                                              JP 1980-179735
                                                               19801220
  GI
       For diagram(s), see printed CA Issue.
                                           CH 1979-11409
                                                               19791221
       Somatostatin analogs I [X = D or L-Trp; X1 = Phe, D-Phe,
  AΒ
       L-NH-CHPhCO (Phg), D-Phg; X2 = .gamma.- or .delta.-aminoalkanoic acid residue; R = acyl] were prepd. Thus, H-Phe-Phe-D-Trp-Lys(BOC)-Thr(CMe3)-
       Phe-Phe-NH(CH2)3CO2H (BOC = Me3CO2C) was prepd. by std. peptide synthetic
      methods and then treated with dicyclohexylcarbodiimide/hydroxybenzotriazol
      e for 18 h at 50.degree. to give cyclo[Phe-Phe-D-Trp-Lys(BOC)-Thr(CMe3)-
      Phe-Phe-NH(CH2)3CO] which was deblocked to give I [X = D-Trp, X1 = Phe, X2
      79775-25-0P 79775-27-2P 79814-96-3P
 IT
      79814-97-4P
      RL: SPN (Synthetic preparation); PREP (Preparation)
 ΙT
      51110-01-1P
      RL: SPN (Synthetic preparation); PREP (Preparation)
         (prepn. of analogs of)
L38 ANSWER 38 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
                          1980:37029 HCAPLUS
DOCUMENT NUMBER:
                          92:37029
TITLE:
                          Chromatographic and biological properties of
                          immunoreactive somatostatin in hypothalamic
                          and extrahypothalamic brain regions of the rat
AUTHOR (S):
                         Rorstad, O. P.; Epelbaum, J.; Brazeau, P.; Martin, J.
CORPORATE SOURCE:
                         Dep. Exp. Med., McGill Univ., Montreal, QC, Can.
SOURCE:
                         Endocrinology (1979), 105(5), 1083-92
CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
    A sheep antiserum to somatostatin [38916-34-6] was
AΒ
    used to develop radioimmunoassay and immunoaffinity chromatog. methods for
    the study of immunoreactive somatostatin (IRS) in brain tissue.
    IRS extd. from rat median eminence, anterior hypothalamic-preoptic area,
```

amygdala, and parietal cortex bound reversibly to immunoaffinity columns, providing a technique for concn. and partial purifn. Immunoaffinity purified IRS from each of the 4 brain regions eluted as 4 peaks on gel filtration chromatog. Each peak possessed biol. activity, as detd. by

```
inhibitory effects on the release of growth hormone [9002-72-6]
                     from cultured rat anterior pituitary cells. No differences were detected by the methods amplified hatman TRC from the anterior hypothalamics.
                     by the methods employed between IRS from the anterior hypothalamic-
                     Dy the methods employed between indifferent interior hypothatamical properties area, which is rich in IRS-contg. neuronal cell bodies, and that
                    from the median eminence, where IRS is localized predominantly in nerve
               IT
                    38916-34-6
                    RL: ANT (Analyte); ANST (Analytical study)
                       (detn. of, by immuno methods)
              IT
                   9002-72-6
                   RL: ANST (Analytical study)
                      : ANDI (ANIALYCLUCAL SCUCLY)
(release of, somatostatin stimulation of, immunomethod for
                      detn. of)
                  54518-52-4 56612-47-6 56612-53-4
            IΤ
                  58959-53-8 58959-54-9 58959-60-7
                 58959-62-9 58959-64-1 58959-66-3
                 58959-68-5 58959-70-9 59481-23-1
                 61518-59-0 61518-61-4 62406-11-5
                 62406-12-6 62406-14-8 62437-57-4
                62802-82-8 63328-61-0 72426-96-1
                72426-97-2 72426-98-3
                RL: ANST (Analytical study)
                   (somatostatin antiserum crossreactivity with)
         L38 ANSWER 39 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
         DOCUMENT NUMBER:
                                     1977:453595 HCAPLUS
        INVENTOR(S):
                                     Somatostatin peptides
                                    Brown, Marvin Ross; Rivier, Jean Edouard Frederic;
       PATENT ASSIGNEE(S):
       SOURCE:
                                    Salk Institute for Biological Studies, USA
       DOCUMENT TYPE:
                                    CODEN: GWXXBX
      LANGUAGE:
      FAMILY ACC. NUM. COUNT:
                                   Patent
      PATENT INFORMATION:
                                   German
           PATENT NO.
                               KIND
          DE 2634416
                                     DATE
                              ----
          US 4372884
                                     -----
                                                      APPLICATION NO.
    PRIORITY APPLN. INFO.:
                               A1
                                     19770224
                                                       -----
                                                                          DATE
                               Ą
                                     19830208
                                                      DE 1976-2634416
    GT
         For diagram(s), see printed CA Issue.
                                                      US 1976-675149
                                                                         19760730
         For glagram(s), see printed to issue.
8-D-tryptophan-somatostatin (I) (D-Trp8-SRIF) was prepd. by the
                                                                         19760408
        solid-phase method using dicyclohexylcarbodiimide coupling as an inhibitor
        of secretion of growth hormone (GH), insulin, and glucagon.
        Of secretion of growth normone (GH), insurin, and grucagon.

Me3CO2C-Asn-OC6H4NO2-4 was condensed by an active ester coupling. The in
       VIVO effect of Alaz-Skir and D-Alaz-Skir on on release and arginine-induced insulin and glucagon secretion are given. The effect of 12 13) on the in wive secretion of GH and
       Alam-SRIF (m = 5, 6, 7, 8, 10, 12, 13) on the in vivo secretion of GH and
 IT
       58959-53-8 58976-47-9
      RL: RCT (Reactant); RACT (Reactant or reagent)
         (growth hormone and insulin and glucagon secretion in response to)
      58959-54-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (growth hormone and insulin secretion in response to)
     51110-01-1DP, analogs 58976-46-8P
IT
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. and growth hormone and insulin and glucagon secretion in
```

IT

```
58959-60-7P 58959-62-9P 58959-64-1P
         58959-66-3P 58959-68-5P 58959-70-9P
         58959-72-1P
         RL: SPN (Synthetic preparation); PREP (Preparation)
    IT
         9002-72-6
        RL: RCT (Reactant); RACT (Reactant or reagent)
            (release of, somatostatin analogs effect on)
        ANSWER 40 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
   ACCESSION NUMBER:
                         1977:38829 HCAPLUS
   DOCUMENT NUMBER:
                            86:38829
   TITLE:
                            Anatomic and phylogenetic distribution of
                            somatostatin
   AUTHOR(S):
                            Vale, Wylie; Ling, Nick; Rivier, Jean; Villarreal,
                            Jose; Rivier, Catherine; Douglas, Carolyn; Brown,
   CORPORATE SOURCE:
                            Lab. Neuroendocrinol., Salk Inst., La Jolla, CA, USA
   SOURCE:
                            Metabolism, Clinical and Experimental (1976), 25(11,
                            Suppl. 1), 1491-4
                            CODEN: METAAJ; ISSN: 0026-0495
  DOCUMENT TYPE:
                            Journal
  LANGUAGE:
                            English
       Immunoreactive somatostatinlike activity (SLA) was found in the
       brain, pancreas, and gastrointestinal trace of all animal species examd.
       (rat, pigeon, frog, catfish, torpedo, and hagfish). The highest concn. of
       SLA in the rat occurred in the hypothalamus, although the gastrointestinal
       tract contained the greatest amt. of total SLA. The pigeon pancreas had
       both the highest SLA concn. and amt. per tissue of any of the tissues (or
       species) tested. Thus, somatostatin, or substances closely
       related to it, has a widespread anatomical and phylogenetic distribution.
       As detd from the immunol. and biol. potencies of various
      somatostatin analogs used in different radioimmunoassays, biol.
      potency is apparently dependent upon the residues Phe6-Lys9 and Phe11 in
      the somatostatin mol. However, there were considerable
      differences between the somatostatin recognition sites of each
      of the 3 antiserum used and the somatotroph receptors. The SLA
      in crude exts. of the tissues examd. exhibited different chromatog. and
      soly. characteristics. However, radioimmunoassay of an ovine hypothalamus
      chromatog. prepn. of somatostatin with different antiserums
      indicated considerable homol. between mols. responsible for SLA and
      somatostatin activity in a variety of tissues and species.
 ΙT
      38916-34-6 54518-51-3 58290-23-6
      58959-53-8 58959-54-9 58959-60-7
      58959-62-9 58959-64-1 58959-66-3
     58959-68-5 58959-70-9 58976-46-8
     59061-34-6 59481-23-1 59481-27-5
     61518-59-0 61518-60-3 61518-61-4
     61518-62-5 61518-63-6
     RL: BIOL (Biological study)
        (growth hormone release-inhibiting activity of)
ΙT
     38916-34-6
     RL: PROC (Process)
        (phylogenetic and tissue distribution of)
L38 ANSWER 41 OF 41 HCAPLUS COPYRIGHT 2003 ACS on STN
                        1976:159897 HCAPLUS
DOCUMENT NUMBER:
                         84:159897
TITLE:
                        Biological activity of somatostatin and
                         somatostatin analogs on inhibition of
                         arginine-induced insulin and glucagon release in the
                        rat
AUTHOR(S):
                        Brown, Marvin; Rivier, Jean; Vale, Wylie
```

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CORPORATE SOURCE:
                          Salk Inst. Biol. Stud., La Jolla, CA, USA
SOURCE:
                          Endocrinology (1976), 98(2), 336-43
                         CODEN: ENDOAO; ISSN: 0013-7227
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                         English
AΒ
     Cyclic somatostatin [38916-34-6] and
     dihydrosomatostatin [40958-31-4] (H2-
     somatostatin) were equipotent in inhibiting insulin [9004-10-8]
     and glucagon [9007-92-5] release induced by arginine in the rat. The ID50
     of H2-somatostatin on insulin and glucagon secretion induced by
     arginine are 14 and 6 .mu.g/100 g resp. similar to the ID50 of H2-
     somatostatin (18 .mu.g/100 g) on inhibition of insulin release
     induced by glucose. With the exception of Ala2-somatostatin [
     58959-53-8] and Ala5-somatostatin [58959-54-9
     ], alanine substituted analogs of somatostatin were less potent
     than somatostatin. D-Trp8-somatostatin [
     58976-46-8] was 6-8 times as potent as somatostatin in
     inhibiting insulin and glucagon release induced by arginine. The relative
     potencies of these analogs to inhibit the secretion of the pancreatic
     hormones are in good agreement with the previously reported values based
     on the inhibition of GH secretion in vitro.
ΙT
     50997-12-1 56637-27-5 58959-55-0
     58959-56-1 58959-57-2 58959-58-3
     58959-59-4 58959-60-7 58959-61-8
     58959-62-9 58959-63-0 58959-64-1
     58959-65-2 58959-66-3 58959-67-4
     58959-68-5 58959-69-6 58959-70-9
     58959-71-0 58959-72-1 58976-47-9
     59061-34-6
     RL: BIOL (Biological study)
        (glucagon and insulin release inhibition by)
ΙT
     40958-31-4
     RL: BIOL (Biological study)
        (glucagon and insulin secretion inhibition by)
ΙT
     38916-34-6
     RL: BIOL (Biological study)
        (glucagon and insulin secretion inhibition by, analogs in relation to)
IT
     58959-53-8 58959-54-9 58976-46-8
     RL: BIOL (Biological study)
        (glucagon and insulin secretion inhibition by, somatostatin
        in relation to)
=>
=>
=> fil reg
FILE 'REGISTRY' ENTERED AT 11:21:04 ON 22 JUL 2003
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provided by InfoChem.
STRUCTURE FILE UPDATES:
                          21 JUL 2003 HIGHEST RN 552272-14-7
DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003
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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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=> select hit rn 138 1-41 E48 THROUGH E306 ASSIGNED

=> =>

=> fil reg
FILE 'REGISTRY' ENTERED AT 11:21:25 ON 22 JUL 2003
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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d .seq 139 1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125

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ANSWER 1 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     204388-11-4 REGISTRY
CN
     Cyclo(4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-5-fluoro-D-
     tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI)
     (CA INDEX NAME)
OTHER NAMES:
     101: PN: US6268342 SEQID: 108 claimed protein
CN
CN
     97: PN: US20020042374 PAGE: 10 claimed protein
NTE cyclic
    modified (modifications unspecified)
______
       ----- location -----
                                        description
------
uncommon Oaa-5 - modification Trp-8 -
                                    fluoro<F>
SOL 8
RN
    204388-11-4 REGISTRY
CN
    Cyclo(4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-5-fluoro-D-
    tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI)
    (CA INDEX NAME)
SOL
SEQ
        1 KTFFXFFW
         ==== ===
HITS AT:
         1-4, 6-8
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
          1:
             137:295256
REFERENCE
          2:
             136:304089
REFERENCE
          3:
             135:132468
REFERENCE
          4:
             131:295567
REFERENCE
         5:
             130:20992
REFERENCE
         6: 130:20991
REFERENCE
         7: 128:226683
L39 ANSWER 5 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    179530-41-7 REGISTRY
CN
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
    (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine
    (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
    (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine
NTE
    multichain
    cyclic, linear
    modified (modifications unspecified)
   -----
             ----- location ----- description
bridge
                       - Maa-1' carba sulfide bridge
             Hcy-1
             Hcy-1
uncommon
                          _
uncommon
              Maa-1'
```

```
Trp-4
 stereo
                                                                               D
 SQL 12,6,6
 RN
         179530-41-7 REGISTRY
         Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
 CN
         L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
          (mercaptoacetyl) glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine
          (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
         Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
 CN
         L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
          (mercaptoacetyl) glycylglycyl-L-cysteinyl-L-lysyl-L-.alpha.-asparagine
 SQL
         12, 6, 6
                 1 XFYWKV
SEQ
HITS AT:
                    1-2, 2-6
REFERENCE 1: 125:52519
L39 ANSWER 10 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
RN
         177789-11-6 REGISTRY
         L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-lysyl-L-cysteinyl-L-lysyl-
CN
         L-arginyl-L-alanyl-L-leucyl-L-valyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-
         L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L-.alpha.-
         glutamylglycyl-L-alanyl-, (1.fwdarw.1')-thioether with
         cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
         lysyl-L-valyl) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
         L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-cysteinyl-L-lysyl-
         L-arginyl-L-alanyl-L-leucyl-L-valyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-
         L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L.alpha. -
         glutamylglycyl-L-alanyl-, (1.fwdarw.1')-sulfide with cyclo(L-homocysteinyl-
         N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valyl)
NTE multichain
         linear, cyclic, linear
         modified (modifications unspecified)
                         ----- location ----- description
                      Lys-1 - Maa-1'' amide bridge
Hcy-1' - Maa-1'' carba sulfide bridge
Hcy-1' - -
Maa-1'' - -
bridge
bridge
uncommon
uncommon
stereo Trp-4'
stereo
SQL 28,21,6,1
        177789-11-6 REGISTRY
CN
        L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-lysyl-L-cysteinyl-L-lysyl-
        \verb|L-arginyl-L-alanyl-L-leucyl-L-valyl-L-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-leucyl-alpha.-aspartyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-alpha.-aspartyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threon
         L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L-.alpha.-
         glutamylglycyl-L-alanyl-, (1.fwdarw.1')-thioether with
         cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-
         lysyl-L-valyl) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
        L-Lysinamide, N6-(mercaptoacetyl)-L-lysyl-L-cysteinyl-L-lysyl-
        L-arginyl-L-alanyl-L-leucyl-L-valyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-
        L-lysyl-L-phenylalanyl-L-valyl-L-threonyl-L-glutaminyl-L-alanyl-L-.alpha.-
         glutamylglycyl-L-alanyl-, (1.fwdarw.1')-sulfide with cyclo(L-homocysteinyl-
        N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-lysyl-L-valy1)
SQL 28,21,6,1
```

```
SEO
         1 XFYWKV
HITS AT:
           1-2, 2-6
REFERENCE
          1: 125:52519
L39 ANSWER 15 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     177789-00-3 REGISTRY
CN
     Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N5-(mercaptoacetyl)-L-
     ornithylglycyl-L-cysteinyl-L-aspartamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN
     Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N5-(mercaptoacetyl)-L-
     ornithylglycyl-L-cysteinyl-L-aspartamide
NTE multichain
    cyclic, linear, linear
    modified (modifications unspecified)
   ------
              ----- location ----- description
_____
         Hcy-1 - Maa-1'' carba sulfide bridge
Orn-1' - Maa-1'' amide bridge
Hcy-1 - - -
Orn-1' - -
bridge
uncommon
uncommon
              Maa-1''
uncommon
stereo
               Trp-4
                                        D
SQL 11, 6, 4, 1
RN
    177789-00-3 REGISTRY
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N5-(mercaptoacetyl)-L-
    ornithylglycyl-L-cysteinyl-L-aspartamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N5-(mercaptoacetyl)-L-
    ornithylglycyl-L-cysteinyl-L-aspartamide
SQL 11,6,4,1
SEO
        1 XFYWKV
HITS AT: 1-2, 2-6
REFERENCE
           1: 125:52519
    ANSWER 20 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN 177788-95-3 REGISTRY
L39
RN
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-
    arginyl-L-cysteine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-
    arginyl-L-cysteine
NTE multichain
    cyclic, linear
    modified (modifications unspecified)
```

description

----- location -----

type

```
Hcy-1 - Maa-1' carba sulfide bridge
Hcy-1 - -
Maa-1' - -
Trp-4 - D
 uncommon
 uncommon
 stereo
 SQL 10, 6, 4
    177788-95-3 REGISTRY
 RN
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-
     arginyl-L-cysteine (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-
     arginyl-L-cysteine
SQL
    10,6,4
SEQ
        1 XFYWKV
          =====
HITS AT: 1-2, 2-6
REFERENCE 1: 125:52519
L39 ANSWER 25 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
    177788-90-8 REGISTRY
RN
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with 3-[(mercaptoacetyl)amino]-L-
    alanyl-L-arginyl-L-cysteinyl-L-lysinamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with 3-[(mercaptoacetyl)amino]-L-
    alanyl-L-arginyl-L-cysteinyl-L-lysinamide
NTE multichain
    cyclic, linear, linear
    modified (modifications unspecified)
-------
        ----- location ----- description
_____
SQL 11, 6, 4, 1
RN
    177788-90-8 REGISTRY
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with 3-[(mercaptoacetyl)amino]-L-
    alanyl-L-arginyl-L-cysteinyl-L-lysinamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with 3-[(mercaptoacetyl)amino]-L-
    alanyl-L-arginyl-L-cysteinyl-L-lysinamide
SQL 11, 6, 4, 1
SEO
       1 XFYWKV
         =====
HITS AT: 1-2, 2-6
```

```
REFERENCE
                        1: 125:52519
          ANSWER 30 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
  RN
           177788-85-1 REGISTRY
           Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
  CN
           L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-seryl-
           L-seryl-L-cysteinamide (9CI) (CA INDEX NAME)
  OTHER CA INDEX NAMES:
          {\tt Cyclo}\, ({\tt L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-D-tryptophyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tr
          L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-seryl-L-
           seryl-L-cysteinamide
 NTE multichain
           cyclic, linear
          modified (modifications unspecified)
                                ----- location ----- description
bridge Hcy-1
uncommon Hcy-1
Maa-1'
 ______
                             Hcy-1 - Maa-1' carba sulfide bridge
Hcy-1 - -
Maa-1' - -
Trp-4 - D
 SQL 10,6,4
 RN
          177788-85-1 REGISTRY
          Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
 CN
          L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-seryl-
          L-seryl-L-cysteinamide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
          Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
          L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-seryl-L-
          seryl-L-cysteinamide
SQL
         10,6,4
                 1 XFYWKV
SEO
                    =====
HITS AT:
                  1-2, 2-6
REFERENCE
                      1: 125:52519
       ANSWER 35 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
T.39
RN
         177788-80-6 REGISTRY
         Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
         L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-
         lysylglycyl-L-cysteinyl-L-lysinamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
         Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
         L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-
         lysylglycyl-L-cysteinyl-L-lysinamide
NTE
         multichain
         cyclic, linear
         modified (modifications unspecified)
        -----
                       ----- location ----- description
______
                  Hcy-1 - Maa-1' carba sulfide bridge
bridge
uncommon
                            Hcy-1
                           Maa-1'
Trp-4
uncommon
                                                                             D
SQL 11,6,5
```

Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-

RN

CN

177788-80-6 REGISTRY

Page 43

```
L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-
     lysylglycyl-L-cysteinyl-L-lysinamide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-
     lysylglycyl-L-cysteinyl-L-lysinamide
SQL
     11,6,5
SEO
         1 XFYWKV
           =====
HITS AT:
           1-2, 2-6
REFERENCE
          1: 125:52519
    ANSWER 40 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
     177788-70-4 REGISTRY
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with (2S)-2-amino-4-
     [(mercaptoacetyl)amino]butanoylglycyl-L-cysteinyl-L-lysinamide (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N4-(mercaptoacetyl)-L-2,4-
     diaminobutanoylglycyl-L-cysteinyl-L-lysinamide
NTE multichain
     cyclic, linear, linear
     modified (modifications unspecified)
    ------
               ----- location ----- description
_______
uncommon
              Maa-1''
stereo
               Trp-4
SQL 11, 6, 4, 1
RN
    177788-70-4 REGISTRY
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with (2S)-2-amino-4-
     [(mercaptoacetyl)amino]butanoylglycyl-L-cysteinyl-L-lysinamide (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N4-(mercaptoacetyl)-L-2,4-
    diaminobutanoylglycyl-L-cysteinyl-L-lysinamide
SQL
    11, 6, 4, 1
        1 XFYWKV
SEQ
          =====
HITS AT:
          1-2, 2-6
REFERENCE
           1: 125:52519
    ANSWER 45 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
L39
    177788-61-3 REGISTRY
RN
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
    (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide
```

(9CI) (CA INDEX NAME)

RN 174900-51-7 REGISTRY

```
OTHER CA INDEX NAMES:
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
     (mercaptoacetyl) glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide
NTE multichain
     linear, cyclic
     modified (modifications unspecified)
   -----
           ----- location ----- description
bridge Maa-1 - Hcy-1' carba sulfide bridge uncommon Maa-1 - - - - uncommon Orn-5 - - - - uncommon Orn-6 - - - D D
           Trp-4'
stereo
SQL 12, 6, 6
    177788-61-3 REGISTRY
CN
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
     (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide
     (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
     (mercaptoacetyl) glycylglycyl-L-cysteinyl-L-ornithyl-D-ornithinamide
SQL 12,6,6
    1 XFYWKV
SEQ
HITS AT: 1-2, 2-6
REFERENCE
         1: 125:52519
L39 ANSWER 50 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
RN
    174900-51-7 REGISTRY
CN
    Technetate(1-)-99Tc, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-
    tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
(SP-5-25) - (9CI)
OTHER CA INDEX NAMES:
                    (CA INDEX NAME)
CN
    Technetate(1-)-99Tc, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-
    tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
    (SP-5-25) -
NTE multichain
    cyclic, linear
    metal complex
    modified (modifications unspecified)
______
              ----- location ----- description
______
bridge Hcy-1 uncommon Hcy-1 uncommon Maa-1' stereo Trp-4
                        - Maa-1' sulfide bridge
                                     D
SQL 11, 6, 5
```

```
Technetate(1-)-99Tc, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-
CN
    tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
     (SP-5-25) - (9CI)
                    (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Technetate(1-)-99Tc, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-
    tyrosyl-D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
SQL 11,6,5
        1 XFYWKV
SEO
          =====
HITS AT:
         1-2, 2-6
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
          1: 124:261669
    ANSWER 55 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
1.39
    174900-46-0 REGISTRY
RN
    Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
CN
    tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyl-L-lysinamidato(3-
    )]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
    tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyl-L-lysinamidato(3-
    )]0x0-, (SP-5-24)-
NTE multichain
    cyclic, linear
    metal complex
    modified (modifications unspecified)
______
         ----- location ----- description
_____
Trp-4
stereo
SQL 10,6,4
    174900-46-0 REGISTRY
RN
    Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
CN
    tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyl-L-lysinamidato(3-
    )]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
     tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    3-[(mercaptoacetyl)amino]-L-alanyl-L-lysyl-L-cysteinyl-L-lysinamidato(3-
    )]0x0-, (SP-5-24)-
SQL 10,6,4
        1 XFYWKV
SEQ
          =====
HITS AT: 1-2, 2-6
```

^{**}RELATED SEQUENCES AVAILABLE WITH SEQLINK**

1: 124:261669

REFERENCE

```
ANSWER 60 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
1.39
    174900-41-5 REGISTRY
RN
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
CN
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-arginyl-L-lysinamidato(4-
    )]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-arginyl-L-lysinamidato(4-
    )]0x0-, (SP-5-25)-
NTE multichain
    linear, cyclic
    metal complex
    modified (modifications unspecified)
______
       ----- location ----- description
______
SQL 12,6,6
    174900-41-5 REGISTRY
RN
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
CN
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-arginyl-L-lysinamidato(4-
    )]oxo-, (SP-5-25)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-arginyl-L-lysinamidato(4-
    )]0x0-, (SP-5-25)-
   12,6,6
SQL
       1 XFYWKV
SEO
HITS AT: 1-2, 2-6
REFERENCE 1: 124:261669
    ANSWER 65 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
L39
    174900-36-8 REGISTRY
RN
    Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
CN
    tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysyl-L-lysinamidato(3-
    )]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
    tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysyl-L-lysinamidato(3-
    )]0x0-, (SP-5-24)-
NTE multichain
    cyclic, linear
    metal complex
    modified (modifications unspecified)
______
              ----- location ----- description
```

```
bridge
                Hcy-1
                           - Lys-1'
                                        covalent bridge
 uncommon
                Hcy-1
 stereo
                Trp-4
                                        D
 SQL 11,6,5
     174900-36-8 REGISTRY
 RN
 CN
     Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
     tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
     N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysyl-L-lysinamidato(3-
     )]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
     Rhenium, [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-
     tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
     N6-(mercaptoacetyl)-L-lysylglycyl-L-cysteinyl-L-lysyl-L-lysinamidato(3-
     )]\inftyo-, (SP-5-24)-
 SQL
    11,6,5
SEO
         1 XFYWKV
          ======
HITS AT:
         1-2, 2-6
REFERENCE 1: 124:261669
L39 ANSWER 70 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
RN
     174900-31-3 REGISTRY
CN
     Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
     D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
     (SP-5-25) - (9CI)
                    (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
     (SP-5-25) -
NTE multichain
    cyclic, linear
    metal complex
    modified (modifications unspecified)
-----
               ----- location ----- description
.
SQL 11, 6, 5
RN
    174900-31-3 REGISTRY
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
CN
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
    (SP-5-25) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamidato(4-)]oxo-,
    (SP-5-25) -
SQL 11, 6, 5
SEQ
        1 XFYWKV
         =====
HITS AT: 1-2, 2-6
```

```
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
           1: 124:261669
    ANSWER 75 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
L39
    174900-26-6 REGISTRY
RN
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
CN
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteinamidato(4-)]oxo-, (SP-5-35)-
    (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteinamidato(4-)]oxo-,
    (SP-5-35) -
NTE multichain
    cyclic, linear
    metal complex
    modified (modifications unspecified)
type ----- location ----- description
_____
bridge Hcy-1 - Maa-1' sulfide bridge
          Hcy-1 -
Maa-1' -
uncommon
uncommon
              Trp-4
                                       D
SOL 10,6,4
    174900-26-6 REGISTRY
RN
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
CN
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-thioether with
    N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteinamidato(4-)]oxo-, (SP-5-35)-
    (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Rhenate(1-), [cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-
    D-tryptophyl-L-lysyl-L-valyl) (1.fwdarw.1')-sulfide with
    N-(mercaptoacetyl)-L-cysteinylglycyl-L-cysteinamidato(4-)]oxo-,
     (SP-5-35) -
SOL
    10,6,4

    1 XFYWKV

SEO
          ======
         1-2, 2-6
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
         1: 124:261669
REFERENCE
    ANSWER 80 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
T.39
    174350-64-2 REGISTRY
RN
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-
    cysteinyl-3-amino-L-alanyl-3-amino-L-alaninamide (9CI) (CA INDEX
    NAME)
OTHER CA INDEX NAMES:
    Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-
    cysteinyl-3-amino-L-alanyl-3-amino-L-alaninamide
OTHER NAMES:
    79: PN: WO02060491 PAGE: 50 claimed sequence
```

```
NTE multichain
    cyclic, linear
    modified (modifications unspecified)
______
             ----- location ----- description
bridge Hcy-1 - Maa-1'
uncommon Hcy-1 -
uncommon Maa-1' -
uncommon Dpr-4' -
uncommon Dpr-5' -
stereo Trp-4 -
                        - Maa-1' sulfide bridge
                                      D
SOL 11,6,5
    174350-64-2 REGISTRY
RN
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)glycyl-L-
    cysteinyl-3-amino-L-alanyl-3-amino-L-alaninamide (9CI) (CA INDEX
    NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)glycyl-L-
     cysteinyl-3-amino-L-alanyl-3-amino-L-alaninamide
     11,6,5
SQL
        1 XFYWKV
SEQ
          =====
          1-2, 2-6
HITS AT:
          1: 139:12393
REFERENCE
           2: 139:12392
REFERENCE
           3: 138:316887
REFERENCE
           4: 137:159312
REFERENCE
           5: 124:212160
REFERENCE
L39 ANSWER 85 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
     174350-42-6 REGISTRY
RN
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N6-[N2-(mercaptoacetyl)-L-
CN
     lysyl]-L-lysyl-L-cysteinyl-L-lysinamide (9CI) (CA INDEX
     NAME)
 OTHER CA INDEX NAMES:
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N6-[N2-(mercaptoacetyl)-L-
     lysyl]-L-lysyl-L-lysyl-L-cysteinyl-L-lysinamide
 OTHER NAMES:
 CN 87: PN: WO02060491 PAGE: 50 claimed sequence
 NTE multichain
     cyclic, linear, linear
     modified (modifications unspecified)
 ----- location ----- description
         Hcy-1 - Maa-1'' sulfide bridge
Lys-1' - Lys-2'' amide bridge
Hcy-1 - -
Maa-1'' - -
Trp-4 - D
 bridge
 bridge
 uncommon
```

uncommon

stereo

Trp-4

```
SQL 12,6,4,2
    174350-42-6 REGISTRY
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
RN
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N6-[N2-(mercaptoacetyl)-L-
    lysyl]-L-lysyl-L-cysteinyl-L-lysinamide (9CI) (CA INDEX
    NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N6-[N2-(mercaptoacetyl)-L-
    lysyl]-L-lysyl-L-lysyl-L-cysteinyl-L-lysinamide
    12, 6, 4, 2
SQL
       1 XFYWKV
SEQ
         =====
         1-2, 2-6
HITS AT:
         1: 139:12393
REFERENCE
             139:12392
REFERENCE
          2:
             138:316887
          3:
REFERENCE
             137:159312
REFERENCE
          4:
             125:52519
REFERENCE
          6: 124:212160
REFERENCE
L39 ANSWER 90 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
    172485-59-5 REGISTRY
RN
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-lysyl-
    L-arginyl-L-cysteinamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-lysyl-L-
    arginyl-L-cysteinamide
NTE multichain
    cyclic, linear
    modified
 ----- location ----- description
_____
 SQL 10,6,4
     172485-59-5 REGISTRY
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N2-(mercaptoacetyl)-L-lysyl-
     L-arginyl-L-cysteinamide (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N2-(mercaptoacetyl)-L-lysyl-L-
     arginyl-L-cysteinamide
 SQL 10,6,4
```

```
1 XFYWKV
SEQ
          =====
HITS AT:
          1-2, 2-6
REFERENCE 1: 125:52519
REFERENCE
           2: 124:169544
    ANSWER 95 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
L39
    172485-54-0 REGISTRY
RN
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
     (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysinamide
     (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
     (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysinamide
NTE multichain
    linear, cyclic
    modified
              ----- location ----- description
 type
SQL 13,7,6
    172485-54-0 REGISTRY
RN
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
     (mercaptoacetyl) glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysinamide
     (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
     (mercaptoacetyl) glycylglycyl-L-cysteinyl-L-lysyl-L-lysyl-L-lysinamide
SQL 13,7,6
         1 XFYWKV
SEO
          1-2, 2-6
HITS AT:
 **RELATED SEQUENCES AVAILABLE WITH SEQLINK**
           1: 125:52519
REFERENCE
           2: 124:261669
 REFERENCE
            3: 124:169544
 REFERENCE
L39 ANSWER 100 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
     161982-59-8 REGISTRY
 RN
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
     (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide (9CI) (CA
```

INDEX NAME)
OTHER CA INDEX NAMES:

Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-

CN

```
L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
     (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide
NTE
    multichain
    cyclic, linear
    modified
----- location ----- description
 type
SOL 11,6,5
    161982-59-8 REGISTRY
RN
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-
     (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide (9CI) (CA
     INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-
     (mercaptoacetyl)glycylglycyl-L-cysteinyl-L-argininamide
    11,6,5
SQL
        1 XFYWKV
SEQ
          =====
          1-2, 2-6
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
               132:20545
REFERENCE
REFERENCE
               131:327610
               129:136495
REFERENCE
           3:
              125:52519
REFERENCE
           4:
              124:261669
           5:
REFERENCE
           6.
              124:197258
REFERENCE
              124:169545
           7:
REFERENCE
              124:169544
            8:
 REFERENCE
            9: 122:234388
 REFERENCE
L39 ANSWER 105 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
     161982-30-5 REGISTRY
 RN
     Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
 CN
     L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-
     cysteinylglycyl-L-cysteine (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
     Cyclo (L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
     L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-
     cysteinylglycyl-L-cysteine
 NTE multichain
     cyclic, linear
```

```
modified (modifications unspecified)
______
          ----- location ----- description
-----
SQL 10,6,4
   161982-30-5 REGISTRY
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
RN
CN
    L-lysyl-L-valyl), (1.fwdarw.1')-thioether with N-(mercaptoacetyl)-L-
    cysteinylglycyl-L-cysteine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Cyclo(L-homocysteinyl-N-methyl-L-phenylalanyl-L-tyrosyl-D-tryptophyl-
    L-lysyl-L-valyl), (1.fwdarw.1')-sulfide with N-(mercaptoacetyl)-L-
    cysteinylglycyl-L-cysteine
   10,6,4
SQL
       1 XFYWKV
SEQ
        =====
HITS AT: 1-2, 2-6
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1: 134:300763
REFERENCE
         2: 134:152627
REFERENCE
REFERENCE
          3: 132:119359
          4: 131:327610
REFERENCE
          5: 125:52519
REFERENCE
          6: 124:261669
REFERENCE
 REFERENCE 7: 122:234388
L39 ANSWER 110 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
    142570-99-8 REGISTRY
CN Somatostatin (sheep), 12-L-alanine-, acetate (salt) (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
    1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-
    undecaazacyclooctatriacontane, cyclic peptide deriv.
 NTE modified (modifications unspecified)
 _____
            ----- location ----- description
 bridge Cys-3 - Cys-14 disulfide bridge undetermined modification
 SQL 14
    142570-99-8 REGISTRY
 OTHER CA INDEX NAMES:
    1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-
     undecaazacyclooctatriacontane, cyclic peptide deriv.
 SQL 14
        1 AGCKNFFWKT FASC
```

SEO

```
6-12
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1 AGCKNFFWKT FASC
SEQ
HITS AT:
          6-12
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
        1 AGCKNFFWKT FASC
SEO
              ===== ==
HITS AT:
          6-12
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
           1: 117:70317
REFERENCE
L39 ANSWER 115 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
    89343-54-4 REGISTRY
RN
    D-Cysteine, L-cysteinyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-
CN
    lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic
     (1.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic
    peptide deriv.
NTE
_______
              ----- location ----- description
 type
_____
       Cys-1 - Cys-9 disulfide bridge
bridge
SQL 9
     89343-54-4 REGISTRY
RN
    D-Cysteine, L-cysteinyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-
CN
     lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl-, cyclic
                                (CA INDEX NAME)
     (1.fwdarw.9)-disulfide (9CI)
OTHER CA INDEX NAMES:
     1,2-Dithia-5,8,11,14,17,20,23,26-octaazacyclononacosane, cyclic
CN
     peptide deriv.
SQL
        1 CFFWKTFFC
SEO
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
           1: 103:135323
REFERENCE
           2: 100:139624
REFERENCE
    ANSWER 120 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
T.39
     79814-97-4 REGISTRY
RN
     Cyclo (4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-
CN
     lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI) (CA INDEX
     NAME)
 OTHER CA INDEX NAMES:
     1,4,7,10,13,16,19,22-Octaazacyclohexacosane, cyclic peptide deriv.
     L-Phenylalanine, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-phenylalanyl-
     D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-, cyclic
     (7.fwdarw.1)-peptide
```

OTHER NAMES:

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95: PN: US20020042374 PAGE: 10 claimed protein
CN
   99: PN: US6268342 SEQID: 106 claimed protein
CN
NTE cyclic
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            ----- location -----
                                     description
-21.
uncommon Oaa-5
SQL 8
   79814-97-4 REGISTRY
RN
    Cyclo(4-aminobutanoyl-L-phenylalanyl-L-phenylalanyl-D-tryptophyl-L-
CN
    lysyl-L-threonyl-L-phenylalanyl-L-phenylalanyl) (9CI) (CA INDEX
    NAME)
OTHER CA INDEX NAMES:
   1,4,7,10,13,16,19,22-Octaazacyclohexacosane, cyclic peptide deriv.
    L-Phenylalanine, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-phenylalanyl-
    D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-, cyclic
    (7.fwdarw.1)-peptide
SQL
    8
       1 KTFFXFFW
SEQ
         ==== ===
         1-4, 6-8
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
          1: 137:295256
REFERENCE
            136:304089
REFERENCE
          2:
            135:132468
REFERENCE
          3:
            131:295567
REFERENCE
          4:
          5: 130:20992
REFERENCE
          6: 130:20991
REFERENCE
          7: 128:226683
REFERENCE
          8: 95:204447
REFERENCE
L39 ANSWER 125 OF 125 REGISTRY COPYRIGHT 2003 ACS on STN
    58959-70-9 REGISTRY
   Somatostatin (sheep), 12-L-alanine- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
    1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-
    undecaazacyclooctatriacontane, cyclic peptide deriv.
 OTHER NAMES:
     [Ala12]Somatostatin
 CN
 _____
             ----- location ----- description
 bridge Cys-3 - Cys-14 disulfide bridge
        _____
 SQL 14
    58959-70-9 REGISTRY
 OTHER CA INDEX NAMES:
     1,2-Dithia-5,8,11,14,17,20,23,26,29,32,35-
     undecaazacyclooctatriacontane, cyclic peptide deriv.
 SQL
    14
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SEQ 1 AGCKNFFWKT FASC

HITS AT: 6-12

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 100:875

REFERENCE 2: 99:16698

REFERENCE 3: 99:6055

REFERENCE 4: 98:210168

REFERENCE 5: 98:191905

REFERENCE 6: 97:85661

REFERENCE 7: 97:1112

REFERENCE 8: 92:37029

REFERENCE 9: 87:53595

REFERENCE 10: 86:38829

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 11:10:35 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d stat que 125

L20 42 SEA FILE=REGISTRY ABB=ON PLU=ON FWWKTFG/SQSP

L22 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20

L23 5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?

L24 89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?

L25 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24

=>

=>

SOURCE:

=> d ibib abs hitrn 125 1-10

L25 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:692513 HCAPLUS

DOCUMENT NUMBER: 138:117735

TITLE: Human somatostatin receptor specificity of

backbone-cyclic analogs containing novel sulfur

building units

AUTHOR(S): Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov,

Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June

9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San

Diego, Calif. CODEN: 69DBAL; ISBN: 0-9715560-0-8

OCCUMENT TYPE:

DOCUMENT TYPE: Conference LANGUAGE: English

AB The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were

prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor dets. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

IT51110-01-1, Somatostatin-14

RL: BSU (Biological study, unclassified); BIOL (Biological study) (somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

51110-01-1D, Somatostatin-14, cyclic analogs IT 252845-37-7, PTR 3173 252845-42-4, PTR 3197 252845-43-5, PTR 3207 252845-44-6, PTR 3211 **252845-45-7**, PTR 3213 **252845-46-8**, PTR 3217 252845-47-9, PTR 3219 252845-48-0, PTR 3221

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg. novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:615640 HCAPLUS

DOCUMENT NUMBER:

137:165559

TITLE: Backbone cyclized radiolabelled somatostatin

analogs

INVENTOR(S): Bonasera, Thomas A.; Livnah, Nurit; Yechezkel, Tamar;

Salitra, Yoseph

PATENT ASSIGNEE(S): Peptor Ltd., Israel

SOURCE: PCT Int. Appl., 104 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.	KI	ND	DATE			A	PPLI	CATI	ON N	0.	DATE			
WO 2002	062819	 A	.2	2002	 0815		W	 O 20	 02-I	- - L91		- 2002	0204		
W:	AE, AC	, AL,	ΑM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ.	CA.	CH.	CN.
	CO, CF	R, CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD.	GE.	GH.
	GM, HE	R, HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK.	LR.
	LS, L7	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO.	NZ.	OM,	PH.
	PL, PI	', RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM.	TN.	TR.	TT.	TZ.
	UA, UG	, US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG.	KZ.	MD.	RU.
	TJ, TM							•	•	•	•		,	,	,
RW:	GH, GM	, KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW.	AT,	BE.	CH.
	CY, DE	, DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL.	PT.	SE.	TR.
	BF, BJ	, CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR.	NE.	SN.	TD.	TG.
PRIORITY APP	LN. INE	·O.:					IL 2	001-	1412	76 [°]	A	2001	0205	,	- 0
OTHER SOURCE						1655	59								
AB Novel r	adiodia	gnost	ic a	nd ra	adio	thera	apeu	tic ;	pept.	ides	whi	ch a:	re		
conform	ational	ly co	nstr	aine	d bad	ckboı	ne c	ycli	zed :	soma	tost	atin		•	

analogs, having improved somatostatin receptor subtype affinity

```
and selectivity are disclosed. The backbone cyclized peptide analogs
       disclosed posses unique and superior properties over other analogs, such
       as chem. and metabolic stability, selectivity, increased bioavailability
       and improved pharmacokinetics. Furthermore, the unique patterns of receptor subtype selectivity provide compds. having improved diagnostic
       and therapeutic utilities. Pharmaceutical compns. comprising the backbone
       cyclized somatostatin analogs and radiolabeled analogs, reagents
       for synthesizing same, and methods of using such compns. for
       radiodiagnostic and radiotherapeutic purposes are also disclosed.
       446311-45-1P 446311-46-2P 446311-47-3P
       446311-49-5P 446311-50-8P 446311-52-0P
       446311-53-1P 446311-54-2DP, complexes with Indium and
      DTPA 446311-55-3DP, complexes with Indium and DTPA
      446311-56-4DP, complexes with Indium and DTPA
      446311-57-5DP, complexes with Indium and DTPA
      446311-58-6DP, complexes with Indium and DTPA
      446311-59-7DP, complexes with Indium and DTPA 446311-60-0P
      446311-61-1P 446311-62-2P 446311-63-3P
      446311-64-4P 446311-65-5P 446311-66-6P
      446311-67-7P 446311-68-8P 446311-69-9P
      446311-70-2P 446311-71-3P 446311-72-4P
      446311-73-5P 446311-74-6P 446311-75-7P
      446311-76-8P 446862-79-9P 446862-80-2P
      RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);
      BIOL (Biological study); PREP (Preparation)
         (backbone cyclized radiolabeled somatostatin analogs as
         potential imaging and therapeutic agents)
      51110-01-1DP, Somatostatin, radiolabeled analogs
      RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic
      use); BIOL (Biological study); PREP (Preparation); USES (Uses)
         (backbone cyclized radiolabeled somatostatin analogs as
         potential imaging and therapeutic agents)
      252845-37-7D, radiolabeled 446311-49-5D, radiolabeled
      446311-50-8D, radiolabeled 446311-52-0D, radiolabeled
      446311-53-1D, radiolabeled
     RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
         (backbone cyclized radiolabeled somatostatin analogs as
        potential imaging and therapeutic agents)
    ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                          2002:332670 HCAPLUS
DOCUMENT NUMBER:
                          136:341003
TITLE:
                        Preparation of conformationally constrained backbone
                          cyclized somatostatin analogs
INVENTOR(S):
                          Hornik, Vered; Afargan, Michel M.; Gellerman, Gary
PATENT ASSIGNEE(S):
                          Israel
SOURCE:
                          U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.
                       No. PCT/IL99/00329.
                          CODEN: USXXCO
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:
```

ΙT

ΙT

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002052315 US 6051554 US 6355613 WO 9965508 W: AE, AL, DE, DK,	A1 A B1 A1 AM, AT EE, ES	20020502 20000418 20020312 19991223 , AU, AZ, BA, , FI, GB, GD,	US 2000-734583 US 1998-100360 US 1998-203389 WO 1999-IL329 BB, BG, BR, BY, CA GE, GH, GM, HR, HU	20001213 19980619 19981202 19990615 , CH, CN, CU, CZ,

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JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
                MD, RU, TJ, TM
            RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
                ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
  PRIORITY APPLN. INFO.:
                                              US 1998-100360
                                                                A2 19980619
                                              US 1998-203389
                                                                A2 19981202
                                              WO 1999-IL329
                                                                A2 19990615
                                              US 1995-488159
                                                                A2 19950607
                                              US 1995-569042
                                                                A2 19951207
                                              US 1996-690609
                                                               A2 19960731
  OTHER SOURCE(S):
                           MARPAT 136:341003
 Q - R^{5} - R^{6} - R^{7} - R^{8} - R^{9} - R^{10} - R^{11} - NR^{12} - X
        — co-(cн<sub>2</sub>)<sub>n</sub>———
                                        Ι
      Novel peptides, e.g., I [n = 1-5; X \text{ designates a terminal carboxy acid,}]
 AΒ
      amide or alc. group; Q is H or a mono- or disaccharide; R5 is
      .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala,
      5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7
      is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8
      is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic
      acid), Cys, Val, D- or L-Ala or -Phe; Rll is D- or L-Phe, -Ala, Nle, or
      Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed
      which are conformationally constrained backbone cyclized
      somatostatin analogs having somatostatin receptor
      sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-
      Phe(N3)-OH (PTR 3205), where one bridge connects the two building units
      (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine
      and a three carbon methylene spacer) and the second is a disulfide bridge
      formed between the two Cys residues, was prepd. by the solid-phase method
      and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal
      somatostatin receptors SST-R1, SST-R3 and SST-R5.
      255850-87-4
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (prepn. of conformationally constrained backbone cyclized
         somatostatin analogs)
     38916-34-6DP, Somatostatin, cyclic analogs
IT
     252845-37-7P, PTR 3173 252845-42-4P, PTR 3197
     252845-43-5P, PTR 3207 252845-44-6P, PTR 3211
     252845-45-7P, PTR 3213 252845-46-8P, PTR 3217
     252845-47-9P, PTR 3219 252845-48-0P, PTR 3221
     RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
         (prepn. of conformationally constrained backbone cyclized
         somatostatin analogs)
L25 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER:
                          2002:203445 HCAPLUS
DOCUMENT NUMBER:
                           136:386388
TITLE:
                           Synthesis of novel protected N.alpha.(.omega.-
                           thioalkyl) amino acid building units and their
                           incorporation in backbone cyclic disulfide and
                           thioetheric bridged peptides
```

Audet 734583-claim 3 and 4

AUTHOR(S):

CORPORATE SOURCE:

Gazal, S.; Gellerman, G.; Glukhov, E.; Gilon, C. Department of Organic Chemistry, Hebrew University,

Jerusalem, Israel

SOURCE:

Journal of Peptide Research (2001), 58(6), 527-539

CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER:

Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

General methods for the prepn. of protected N.alpha.(.omega.-thioalkyl) amino acids building units for backbone cyclization using reductive alkylation and on-resin prepn. are described. The synthesis of non-Gly Fmoc-protected S-functionalized N-alkylated amino acids is based on the reaction of readily prepd. protected .omega.-thio aldehyde with the appropriate amino acid. Prepn. of Fmoc-protected S-functionalized N-alkylated Gly building units was carried out using two methods: reaction of glyoxylic acid with Acm-thioalkylamine and an on-resin reaction of bromoacetyl resin with Trt-thioalkylamines. Three model peptides were prepd. using these building units. The GlyS2 building unit was incorporated into a backbone cyclic analog of somatostatin that contains a disulfide bridge. Formation of the disulfide bridge was performed by on-resin oxidn. using I2 or TI(CF3COO-)3. Both methods resulted in the desired product in a high degree of purity in the crude. The AspS3 building unit was also successfully incorporated into a model peptide. In addn., the in situ generation of sulfur contg. Gly building units was demonstrated on a Substance P backbone cyclic analog contg. a

ΙT 252845-42-4P

thioether bridge.

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of protected thioalkyl amino acids for incorporation in backbone cyclic disulfide and thioetheric bridged peptides using reductive alkylation and on-resin oxidn.)

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:197431 HCAPLUS

DOCUMENT NUMBER: TITLE:

136:386384 Human Somatostatin Receptor Specificity of

Backbone-Cyclic Analogues Containing Novel Sulfur

THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS

Building Units

AUTHOR(S):

Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

SOURCE:

Journal of Medicinal Chemistry (2002), 45(8),

1665-1671

CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society

PUBLISHER:

DOCUMENT TYPE:

Journal

26

LANGUAGE:

English

$$\begin{array}{c} \text{CO-Phe-Trp-D-Trp-Lys-Thr-Phe-N-CH}_2-\text{CONH}_2\\ \text{(CH}_2)_3\\ \text{HN:} & \text{CO} \end{array}$$

- AΒ Somatostatin-14 (somatostatin) and its clin. available analogs (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Acm-S-CH2CH2N(Fmoc)CH2CO2H (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.
- ΙT **252845-37-7**, PTR 3173

RL: BSU (Biological study, unclassified); BIOL (Biological study) (prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

51110-01-1DP, Somatostatin-14, disulfide-bridged analogs TΤ

252845-42-4P 252845-43-5P 252845-44-6P

252845-45-7P 252845-46-8P 252845-47-9P

425428-86-0P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged

somatostatin analogs)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

25

ACCESSION NUMBER: 2002:182173 HCAPLUS

DOCUMENT NUMBER: 136:227293

```
TITLE:
                             Selectivity of conformationally constrained backbone
                             cyclized somatostatin analogs with respect
                             to insulin, GH, and glucagon secretion and
                             somatostatin receptor binding
 INVENTOR(S):
                             Hornik, Vered; Gellerman, Gary; Afargan, Mich El M.
 PATENT ASSIGNEE(S):
                             Peptor Limited, Israel
 SOURCE:
                             U.S., 21 pp., Cont.-in-part of U.S. 6,051,554.
                             CODEN: USXXAM
 DOCUMENT TYPE:
                             Patent
 LANGUAGE:
                             English
 FAMILY ACC. NUM. COUNT:
                            10
 PATENT INFORMATION:
      PATENT NO.
                        KIND DATE
                                               APPLICATION NO. DATE
                        ____
                                -----
                                                -----
                                                                  _____
      US 6355613
                         В1
                                20020312
                                                US 1998-203389 19981202
      US 6051554
                         Α
                                20000418
                                                US 1998-100360
                                                                 19980619
      CA 2335488
                         AA
                                                CA 1999-2335488 19990615
                                19991223
      WO 9965508
                         A1
                                19991223
                                                WO 1999-IL329
                                                                  19990615
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
               MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
               ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
               CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      AU 9942884
                        A1
                               20000105
                                               AU 1999-42884
                                                                  19990615
      AU 747515
                         B2
                               20020516
      EP 1085896
                         Α1
                               20010328
                                               EP 1999-957020
                                                                  19990615
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, FI
      JP 2002518339
                               20020625
                         Т2
                                                JP 2000-554387
                                                                  19990615
      US 2002052315
                         A1
                               20020502
                                               US 2000-734583
                                                                  20001213
PRIORITY APPLN. INFO.:
                                            US 1996-690609
                                                             A2 19960731
                                            US 1998-100360
                                                             A2 19980619
                                            US 1995-488159
                                                              A2 19950607
                                            US 1995-569042
                                                              A2 19951207
                                            US 1998-203389 A 19981202
                                            WO 1999-IL329
                                                              W 19990615
OTHER SOURCE(S):
                           MARPAT 136:227293
     Novel peptides which are conformationally constrained backbone cyclized
     somatostatin analogs. Methods for synthesizing the
     somatostatin analogs and for producing libraries of the
     somatostatin analogs are also disclosed. Furthermore,
     pharmaceutical compns. comprising somatostatin analogs, and
     methods of using such compns. are disclosed.
TT
     40958-31-4DP, Somatostatin (sheep reduced), cyclic
     analogs
     RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation);
     THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial
     study); PREP (Preparation); USES (Uses)
         (prepn. of conformationally constrained backbone cyclized
        somatostatin analogs for therapeutic use)
ΙT
     9002-72-6, Growth hormone
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (selectivity of conformationally constrained backbone cyclized
        somatostatin analogs with respect to insulin, GH, and glucagon
        secretion and somatostatin receptor binding)
     252845-37-7P 252845-42-4P
ΙŢ
     RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation);
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THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial

Audet 734583-claim 3 and 4

study); PREP (Preparation); USES (Uses)

(selectivity of conformationally constrained backbone cyclized somatostatin analogs with respect to insulin, GH, and glucagon

secretion and somatostatin receptor binding)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2001:783790 HCAPLUS

DOCUMENT NUMBER:

136:151429

A bioactive somatostatin analog without a

type II' .beta.-turn: synthesis and conformational

analysis in solution

AUTHOR(S):

Jiang, Shaokai; Gazal, Sharon; Gelerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michael; Gilon, Chaim; Goodman, Murray

CORPORATE SOURCE:

Department of Chemistry and Biochemistry, University

of California, San Diego, La Jolla, CA, USA

SOURCE:

Journal of Peptide Science (2001), 7(10), 521-528, 2

plates

CODEN: JPSIEI; ISSN: 1075-2617

PUBLISHER: DOCUMENT TYPE:

John Wiley & Sons Ltd.

LANGUAGE:

Journal English

GI

Ι

A cyclic **somatostatin** analog I has been synthesized. Biol. assays show that this compd. has strong binding affinities to **somatostatin** hsst2 and hsst5 receptor subtypes (5.2 and 1.2 nM, resp., and modest affinity to hsst4 (41.1 nM)). Our conformational anal. carried out in DMSO-d6 indicates that this compd. exists as two structures arising from the trans and cis configurations of the peptide bond between Phe7 and N-alkylated Gly8. However, neither conformer exhibits a type II' .beta.-turn. This is the first report of a potent bioactive somatostatin analog that does not exhibit a type II' .beta.-turn in soln. Mol. dynamics simulations (500 ps) carried out at 300 K indicate that the backbone of compd. I is more flexible than other cyclic somatostatin analogs formed by disulfide bonds.

ΙT 51110-01-1DP, Somatostatin, analogs 252845-42-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (solid phase peptide synthesis and conformation by NMR of bioactive somatostatin analog without type II .beta.-turn)

REFERENCE COUNT:

36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2001:607431 HCAPLUS

DOCUMENT NUMBER:

135:313821

TITLE:

AUTHOR(S):

A novel somatostatin analogue prevents early

renal complications in the nonobese diabetic mouse

Landau, Daniel; Segev, Yael; Afargan, Michel; Silbergeld, Aviva; Katchko, Leonid; Podshyvalov,

Andrey; Phillip, Moshe

CORPORATE SOURCE:

Department of Pediatrics and Pathology, Laboratory of Molecular Endocrinology, University of the Negev, Beer Sheva, Israel

SOURCE: Kidney International (2001), 60(2), 505-512
CODEN: KDYIA5; ISSN: 0085-2538

PUBLISHER: Blackwell Science, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB PTR-3173 (S) is a novel somatostatin analog that has been found to exert a prolonged inhibitory action on the growth hormone (GH)-insulin-like growth factor (IGF)-I axis, but not on insulin secretion. The authors investigated the potential effect of this agent on the development of markers of diabetic nephropathy in the nonobese diabetic (NOD) mouse model of insulin-dependent diabetes. Female diabetic NOD mice treated with PTR-3173 (DS group) or saline (D) and their control groups of nonhyperglycemic age-matched littermates (C) and C mice treated with PTR-3173 (CS) were sacrificed 3 wk after onset of diabetes. Serum GH was elevated in the D group, decreased in the DS group, and unchanged in the CS group. Serum IGF-I was significantly decreased in both the D and DS groups. Kidney wt., glomerular vol., albuminuria, and creatinine clearance were increased in the D animals and showed a trend toward normalization in the DS animals. Renal extractable IGF-I protein and IGFBP1 mRNA were increased in the D group and normalized in the DS group. GH antagonism by PTR-3173 has a blunting effect on renal/glomerular hypertrophy, albuminuria, and glomerular filtration rate (GFR) in diabetic NOD mice. This phenomenon is apparently assocd. with the prevention of renal IGF-I accumulation. Thus, modulation of GH effects may have

beneficial therapeutic implications in diabetic nephropathy. ΙT **252845-37-7**, PTR 3173

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(somatostatin analog PTR 3173 prevents early renal complications in nonobese diabetic mouse)

IT9002-72-6, Growth hormone 67763-96-6, IGF-I

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(somatostatin analog PTR 3173 prevents early renal

complications in nonobese diabetic mouse)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

2001:51142 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 134:95704

TITLE: Novel long-acting somatostatin analog with

endocrine selectivity: potent suppression of growth

hormone but not of insulin

AUTHOR(S): Afargan, Michel; Janson, Eva Tiensuu; Gelerman, Garry;

Rosenfeld, Rakefet; Ziv, Offer; Karpov, Olga; Wolf, Amnon; Bracha, Moshe; Shohat, Dvira; Liapakis, George;

Gilon, Chaim; Hoffman, Amnon; Stephensky, David; Oberg, Kjell

CORPORATE SOURCE: Peptor Ltd., Kiryat Weizmann, Rehovot, 76326, Israel

Endocrinology (2001), 142(1), 477-486 CODEN: ENDOAO; ISSN: 0013-7227 SOURCE:

PUBLISHER: Endocrine Society

DOCUMENT TYPE: Journal LANGUAGE: English

Somatostatin, also known as somatotropin

release-inhibiting factor (SRIF), is a natural cyclic peptide inhibitor of pituitary, pancreatic, and gastrointestinal secretion. Its long-acting analogs are in clin. use for treatment of various endocrine syndromes and gastrointestinal anomalies. These analogs are more potent inhibitors of the endocrine release of GH, glucagon, and insulin than the native SRIF;

hence, they do not display considerable physiol. selectivity. Our goal was to design effective and physiol. selective SRIF analogs with potential therapeutic value. We employed an integrated approach consisting of screening of backbone cyclic peptide libraries constructed on the basis of mol. modeling of known SRIF agonists and of high throughput receptor binding assays with each of the five cloned human SRIF receptors (hsst1-5). By using this approach, we identified a novel, high affinity, enzymically stable, and long-acting SRIF analog, PTR-3173, which binds with nanomolar affinity to human SRIF receptors hsst2, hsst4, and hsst5. The hsst5 and the rat sst5 (rsst5) forms have the same nanomolar affinity for this analog. In the human carcinoid-derived cell line BON-1, PTR-3173 inhibits forskolin-stimulated cAMP accumulation as efficiently as the drug octreotide, indicating its agonistic effect in this human cell system. In hormone secretion studies with rats, we found that PTR-3173 is 1000-fold and more than 10,000-fold more potent in inhibiting GH release than glucagon and insulin release, resp. These results suggest that PTR-3173 is the first highly selective somatostatinergic analog for the in vivo inhibition of GH secretion, with minimal or no effect on glucagon and insulin release, resp.

ΙT **252845-37-7**, PTR 3173

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(long-acting somatostatin analog with endocrine selectivity for potent suppression of growth hormone but not of insulin secretion)

9002-72-6, Growth hormone RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process) (long-acting somatostatin analog with endocrine selectivity for potent suppression of growth hormone but not of insulin secretion)

ΙT **51110-01-1**, Somatostatin-14

RL: BSU (Biological study, unclassified); BIOL (Biological study) (long-acting somatostatin analog with endocrine selectivity for potent suppression of growth hormone but not of insulin secretion and receptor binding selectivity)

REFERENCE COUNT:

INVENTOR(S):

IT

THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2003 ACS on STN

48

ACCESSION NUMBER: 1999:811096 HCAPLUS

DOCUMENT NUMBER: 132:50250

TITLE:

Preparation of conformationally constrained backbone

cyclized somatostatin analogs Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Peptor Ltd., Israel

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT	NO.		KI:	ND	DATE			A	PPLI	CATI	ON N	0.	DATE			
WO 9965					1999			W	0 19	99-I	L329		1999	0615		
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	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR.	LS.	LT.	LU.	LV,	MD.	MG.	MK.
	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU.	SD.	SE.	SG.	SI,	SK.	SL.	T.T.
	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN.	YU.	ZA.	ZW.	AM.	AZ,	BY.	KG.	KZ
	MD,	RU,	ТJ,	TM		•	•	•	- *	,	,	,	,		110,	102,
RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ.	UG.	ZW.	AT.	BE.	CH.	CY.	DE	DK
	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,	CF,	CG,

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CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                                          EP 1999-957020
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             IE, FI
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                                           US 2000-734583
                                                            20001213
PRIORITY APPLN. INFO.:
                                        US 1998-100360 A 19980619
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                                                        A2 19950607
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                                                        A2 19951207
                                        US 1996-690609
                                                        A2 19960731
                                        WO 1999-IL329
                                                        W 19990615
OTHER SOURCE(S):
                       MARPAT 132:50250
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AΒ Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5. 38916-34-6DP, Somatostatin, cyclic analogs

38916-34-6DP, Somatostatin, cyclic analogs 252845-37-7P, PTR 3173 252845-42-4P, PTR 3197 252845-43-5P, PTR 3207 252845-44-6P, PTR 3211 252845-45-7P, PTR 3213 252845-46-8P, PTR 3217 252845-47-9P, PTR 3219 252845-48-0P, PTR 3221

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized

somatostatin analogs)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> =>

=> select hit rn 125 1-10

E1 THROUGH E47 ASSIGNED

=> fil reg FILE 'REGISTRY' ENTERED AT 11:11:45 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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=> d sqide can 126 1-42

L26 ANSWER 1 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 446862-80-2 REGISTRY

CN Rhenium, [glycyl-.kappa.N-2-[[(mercapto-.kappa.S)acetyl]amino-.kappa.N]-.beta.-alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-D-tryptophyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

type	locat	ion -	(description
uncommon uncommon stereo	Bal-2 Dab-3 Trp-5	- - -	- - D	
			·	

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C70 H88 N17 O15 Re S

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 2 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN RN 446862-79-9 REGISTRY
CN Rhenate(1-), [N-[(mercapto-.kappa.S)acety1]-3-[[(mercapto-.kappa.S)acety1]

.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-D-tryptophyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

type	loca	 desertPeron	
uncommon	Bal-2	 _	

uncommon Dab-3 - - stereo Trp-5 - D

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C70 H86 N16 O15 Re S2 . H

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 3 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN RN 446311-76-8 REGISTRY

Rhenium, [glycyl-.kappa.N-3-[[(mercapto-.kappa.S)acetyl]amino-CN .kappa.N]alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-Lphenylalanyl-D-tryptophyl-L-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-, (SP-5-23)-(9CI)(CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 11

NTE metal complex

modified (modifications unspecified)

	- 			
type	1	ocation	description	
bridge	Dab-4	- Gly-11	covalent bridge	
uncommon	Bal-3	- CIY 11	-	
uncommon	Dab-4	_	_	
stereo	Trp-6	_	P	

SEQ 1 GAXXFWWKTF G

HITS AT: 5-11

MF C70 H88 N17 O15 Re S

CI CCS

SR CA

STN Files: LCCA, CAPLUS, TOXCENTER

PAGE 1-A

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26

RN

ANSWER 4 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN 446311-75-7 REGISTRY
Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-CN glycyl-.kappa.N-6-aminohexanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-Ltryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24)-(9CI)(CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL

NTE metal complex

modified (modifications unspecified)

type 	lo	ocation	description		
bridge	Dab-5	- Gly-12	covalent bridge		
uncommon	Oaa-4	-	-		
uncommon	Dab-5	-	-		
stereo	Trp-8	-	D		

SEQ 1 GGGXXFWWKT FG ==== ==

HITS AT: 6-12

RELATED SEQUENCES AVAILABLE WITH SEQLINK

 $\text{C74}\ \text{H93}\ \text{N17}\ \text{O16}\ \text{Re}\ \text{S}$. H MF

CI CCS SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 2-A

PAGE 3-A

● H+

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

ANSWER 5 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

446311-74-6 REGISTRY
Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-CN glycyl-.kappa.N-5-aminopentanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-Ltryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24)-(9CI)(CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL

NTE metal complex

modified (modifications unspecified)

type - -	lo	ocation	description	
bridge uncommon uncommon stereo	Dab-5 Oaa-4 Dab-5 Trp-8	- Gly-12 - - -	covalent bridge - - D	

SEQ 1 GGGXXFWWKT FG

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HITS AT: 6-12

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C73 H91 N17 O16 Re S . H

CI CCS

SR CA

LCSTN Files: CA, CAPLUS, TOXCENTER

PAGE 2-A

OH Me-CH R

PAGE 3-A

● H+

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 6 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

446311-73-5 REGISTRY
Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.Nglycyl-.kappa.N-4-aminobutanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-Ltryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24) - (9CI)(CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 12

NTE metal complex

modified (modifications unspecified)

type 	lc	cation	descripti	on
bridge uncommon uncommon stereo	Dab-5 Oaa-4 Dab-5 Trp-8	- Gly-12 	covalent bride	re
				

SEQ 1 GGGXXFWWKT FG

HITS AT: 6-12

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C72 H89 N17 O16 Re S . H MF

CI CCS

SR CA

LCSTN Files: CA, CAPLUS, TOXCENTER

PAGE 2-A

OН Me-CH R

PAGE 3-A

- 1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559 L26 ANSWER 7 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

446311-72-4 REGISTRY Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-CNglycyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-Ltryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24) - (9CI)(CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL

NTE metal complex

modified (modifications unspecified)

type 	lo	ocation	description
bridge uncommon uncommon stereo	Dab-5 Bal-4 Dab-5 Trp-8	- Gly-12 - - -	covalent bridge - - D
		·	

SEQ 1 GGGXXFWWKT FG

HITS AT: 6-12

C71 H87 N17 O16 Re S . H MF

CI CCS

SR CA

LCSTN Files: CA, CAPLUS, TOXCENTER

PAGE 1-A

PAGE 2-A

OH Me-CH R

PAGE 3-A

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

ANSWER 8 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN L26

RN446311-71-3 REGISTRY

Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-CN glycyl-.kappa.N-glycyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-Ltryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)glycinamide (12.fwdarw.5)-lactamato(4-)]oxo-, hydrogen, (SP-5-24) - (9CI) (CA INDEX NAME) FS

PROTEIN SEQUENCE

SQL 12

NTEmetal complex

modified (modifications unspecified)

type 	lo	cation	description	
bridge uncommon stereo	Dab-5 Dab-5 Trp-8	- Gly-12 - -	covalent bridge D	

SEQ 1 GGGGXFWWKT FG

HITS AT: 6-12

C70 H85 N17 O16 Re S . H MF

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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OH | Me-CH | R

PAGE 3-A

● H+

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 9 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-70-2** REGISTRY Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]glycyl-.kappa.N-glycyl-.kappa.N-CN glycyl-.kappa.N-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-Dtryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(4-)]oxo-, hydrogen, (SP-5-24)- (9CI) (CA INDEX NAME) FS PROTEIN SEQUENCE SQL 11 NTE metal complex modified (modifications unspecified) ---------- location ----- description -----bridge Dab-4 - Gly-11 covalent bridge uncommon Dab-4 Trp-7 D 1 GGGXFWWKTF G

HITS AT: 5-11

MF C68 H82 N16 O15 Re S . H

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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OH Me-CHR

PAGE 3-A

● H+

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

ANSWER 10 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN L26

RN

446311-69-9 REGISTRY
Rhenate(1-), [N-[(mercapto-.kappa.S)acety1]-3-[[(mercapto-CN .kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-6-aminohexanoyl-(2S)-2,4diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-Lthreonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

type 	1c	ocation	description		
bridge uncommon uncommon stereo	Dab-3 Oaa-2 Dab-3 Trp-6	- Gly-10 - - -	covalent bridge - - D	-	

SEQ 1 AXXFWWKTFG

HITS AT: 4 - 10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C73 H92 N16 O15 Re S2 . H

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)
1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

ANSWER 11 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN L26 **446311-68-8** REGISTRY RNCN .kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-5-aminopentanoyl-(2S)-2,4diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-Lthreonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) NAME) PROTEIN SEQUENCE FS SQL 10 NTE metal complex modified (modifications unspecified) ----- location ----description

Audet 734583-claim 3 and 4

stereo	Trp-6	-	D	
uncommon	Dab-3	_	-	
uncommon	Oaa-2	-	-	
bridge	Dab-3	- Gly-10	covalent bridge	

SEQ

1 AXXFWWKTFG

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C72 H90 N16 O15 Re S2 . H

CI

SR CA

LC

STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559 L26 ANSWER 12 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-67-7** REGISTRY

CN Rhenium, [glycyl-.kappa.N-2-[[(mercapto-.kappa.S)acetyl]amino-.kappa.N]-.beta.-alanyl-.kappa.N-4-aminobutanoyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

		description
uncommon Oa uncommon Da	b-3 - Gly-10 a-2 - b-3 - p-6 -	covalent bridge - - D

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C71 H90 N17 O15 Re S

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 13 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

 $\begin{array}{lll} \textbf{446311-66-6} & \texttt{REGISTRY} \\ \texttt{Rhenate(1-),} & [\texttt{N-[(mercapto-.kappa.S)acety1]-3-[[(mercapto-.kappa.S)acety1]-3-[]} \end{array}$ CN .kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-4-aminobutanoyl-(2S)-2,4diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-Lthreonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTEmetal complex

modified (modifications unspecified)

			·	
type 	10	ocation	description	
bridge uncommon uncommon stereo	Dab-3 Oaa-2 Dab-3 Trp-6	- Gly-10 - - -	covalent bridge - - D	

SEQ 1 AXXFWWKTFG

HITS AT: 4 - 10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C71 H88 N16 O15 Re S2 . H MF

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

ANSWER 14 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN L26 RN

446311-65-5 REGISTRY

Rhenium, [glycyl-.kappa.N-2-[[(mercapto-.kappa.S)acetyl]amino-.kappa.N]-CN .beta.-alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-Lphenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-, (SP-5-24)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

1	ocation	description
Dab-3 Bal-2 Dab-3	- Gly-10	covalent bridge
	Dab-3 Bal-2	Bal-2

Trp-6

1 AXXFWWKTFG

HITS AT:

4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C70 H88 N17 O15 Re S

CI CCS

SR CA

LC

STN Files: CA, CAPLUS, TOXCENTER

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- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 15 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-64-4** REGISTRY

Rhenate(1-), [N-[(mercapto-.kappa.S)acety1]-3-[[(mercapto-CN

Audet 734583-claim 3 and 4

.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-.beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

·				
type 	10	ocation	description	_
bridge uncommon uncommon stereo	Dab-3 Bal-2 Dab-3 Trp-6	- Gly-10 - - -	covalent bridge - D	-

SEQ 1 AXXFWWKTFG

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C70 H86 N16 O15 Re S2 . H

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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PAGE 1-B

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 16 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-63-3** REGISTRY

CN Rhenium, [glycyl-.kappa.N-2-[[(mercapto-.kappa.S)acetyl]amino-.kappa.N]-.beta.-alanyl-.kappa.N-glycyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (11.fwdarw.4)-lactamato(3-)]oxo-, (SP-5-24)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

type 	loc	cation	description
bridge uncommon stereo	Dab-3 Dab-3 Trp-6	- Gly-10 - -	covalent bridge - D

SEQ 1 AGXFWWKTFG

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C69 H86 N17 O15 Re S

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 17 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-62-2** REGISTRY

CN Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[(mercapto-.kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-glycyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 10

NTE metal complex

modified (modifications unspecified)

		1	<i>'</i>	
type	lo	cation	description	
bridge	Dab-3	- Glv-10	Covalent bridge	

SEQ 1 AGXFWWKTFG ======

HITS AT: 4-10

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C69 H84 N16 O15 Re S2 . H

CI CCS

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

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1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 18 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN RN 446311-61-1 REGISTRY

CN Rhenium, [glycyl-.kappa.N-2-[[(mercapto-.kappa.S)acetyl]amino-.kappa.N]-.beta.-alanyl-.kappa.N-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (10.fwdarw.3)-lactamato(3-)]oxo-, (SP-5-24)-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE

SQL 9

NTE metal complex

modified (modifications unspecified)

type	loca	ation	description
bridge	Dab-2	- Gly-9	covalent bridge
uncommon	Dab-2	-	-
stereo	Trp-5	-	D

SEQ 1 AXFWWKTFG

HITS AT: 3-9

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C67 H83 N16 O14 Re S

CI CCS

SR CA

LC STN Files:

CA, CAPLUS, TOXCENTER

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— Ме

1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 137:165559 REFERENCE

ANSWER 19 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN L26

RN

446311-60-0 REGISTRY
Rhenate(1-), [N-[(mercapto-.kappa.S)acetyl]-3-[[(mercapto-CN .kappa.S)acetyl]amino-.kappa.N]alanyl-.kappa.N-(2S)-2,4-diaminobutanoyl-Lphenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)glycinamide (9.fwdarw.2)-lactamato(4-)]oxo-, hydrogen, (SP-5-35)-(9CI)(CA INDEX NAME)

PROTEIN SEQUENCE FS

SQL

metal complex NTE

modified (modifications unspecified)

type	lo	cation	description	
bridge	Dab-2	- Gly-9	covalent bridge	
uncommon	Dab-2	-	-	
stereo	Trp-5	-	D	

1 AXFWWKTFG SEO

HITS AT: 3-9

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C67 H81 N15 O14 Re S2 . H

CI CCS

SR CA

STN Files: CA, CAPLUS, TOXCENTER LC

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- Me

● H+

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

1: 137:165559 REFERENCE

ANSWER 20 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN L26

446311-59-7 REGISTRY RN

Glycinamide, 3-amino-N-[3-(aminomethyl)benzoyl]alanyl-L-phenylalanyl-L-CNtryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)-, (8.fwdarw.13)-lactam (9CI) (CA INDEX NAME) PROTEIN SEQUENCE; STEREOSEARCH

FS

SQL

modified (modifications unspecified) NTE

type		location	description
bridge	Dpr-1	- Gly-8	covalent bridge
uncommon	Dpr-1	-	

stereo

Trp-4

SEQ

1 XFWWKTFG

HITS AT:

2-8

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C67 H80 N14 O11

MF

SR CA

LC

STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

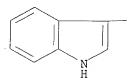
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__NH2

=0

__ Ph

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1947 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 21 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

446311-58-6 REGISTRY Glycinamide, 3-amino-N-(5-amino-1-oxopentyl)alanyl-L-phenylalanyl-L-CN tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)-, (8.fwdarw.13)-lactam (9CI) (CA INDEX NAME) PROTEIN SEQUENCE; STEREOSEARCH

FS

SQL

NTE modified (modifications unspecified)

type	lo	ocation	description
bridge uncommon	Dpr-1 Dpr-1	- Gly-8	covalent bridge
stereo	Trp-4	_	D

SEQ 1 XFWWKTFG

HITS AT: 2-8

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C64 H82 N14 O11

CA

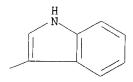
STN Files: CA, CAPLUS, TOXCENTER LC

Absolute stereochemistry.

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0==

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 22 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

446311-57-5 REGISTRY Glycinamide, 3-amino-N-(4-amino-1-oxobutyl)alanyl-L-phenylalanyl-L-CN tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)-, (8.fwdarw.13)-lactam (9CI) (CA INDEX NAME)
PROTEIN SEQUENCE; STEREOSEARCH

FS

SQL 8

NTE modified (modifications unspecified)

type 	lo	cation	description	
bridge uncommon stereo	Dpr-1 Dpr-1 Trp-4	- Gly-8 - -	covalent bridge - D	

SEQ 1 XFWWKTFG

====== HITS AT: 2-8

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MFC63 H80 N14 O11

SR

LCSTN Files: CA, CAPLUS, TOXCENTER

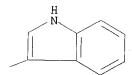
Absolute stereochemistry.

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0=

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 23 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

446311-56-4 REGISTRY Glycinamide, .beta.-alanyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-CN tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3carboxypropyl)-, (9.fwdarw.2)-lactam (9CI) (CA INDEX NAME)
PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type 	lo	ocation	description
bridge uncommon uncommon stereo	Dab-2 Bal-1 Dab-2 Trp-5	- Gly-9 - - - -	covalent bridge - - D

SEQ 1 XXFWWKTFG

======

HITS AT: 3-9

MF C63 H80 N14 O11

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

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HN
$$\frac{H}{N}$$
 $\frac{H}{N}$ \frac

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Ph

__NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 24 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

446311-55-3 REGISTRY
Glycinamide, (2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-CN tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (8.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

Audet 734583-claim 3 and 4

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type		location	description	
bridge	Dab-1	- Gly-8	covalent bridge	
uncommon	Dab-1	-	-	
stereo	Trp-4	-	D	

SEQ

1 XFWWKTFG

======

HITS AT: 2-8

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C60 H75 N13 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

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Ph

- NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 25 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

446311-54-2 REGISTRY Glycinamide, glycyl-(2S)-2,4-diaminobutanoyl-L-phenylalanyl-L-tryptophyl-D-CN tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (9.fwdarw.2)-lactam (9CI) (CA INDEX NAME)

Audet 734583-claim 3 and 4

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL 9

NTE modified (modifications unspecified)

type 	10	ocation	description
bridge uncommon stereo	Dab-2 Dab-2 Trp-5	- Gly-9 - -	covalent bridge - D

SEQ 1 GXFWWKTFG

HITS AT: 3-9

C62 H78 N14 O11 MF

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

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Ph

-- NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 26 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-53-1** REGISTRY

Glycinamide, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-tryptophyl-D-CN tryptophyl-D-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

Audet 734583-claim 3 and 4

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL

NTE modified (modifications unspecified)

type	lo	cation	description	
bridge stereo stereo	Phe-1 Trp-3 Lys-4	- Gly-7 	covalent bridge D	

SEQ 1 FWWKTFG

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C60 H74 N12 O10

SR

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

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Ph

—— C

__ NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 27 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-52-0** REGISTRY

Glycinamide, N-[[(3-aminopropyl)amino]carbonyl]-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

NTE modified (modifications unspecified)

type ----- location ----- description

bridge Phe-1 - Gly-7 covalent bridge stereo Trp-3 - D

SEQ 1 FWWKTFG

======

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C60 H75 N13 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA.

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 28 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **446311-50-8** REGISTRY

CN Glycinamide, N-[[(2-aminoethyl)amino]carbonyl]-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

NTE modified (modifications unspecified)

type ----- location ----- description

bridge stereo

Phe-1 Trp-3

- Gly-7

covalent bridge D

SEQ 1 FWWKTFG ======

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MFC59 H73 N13 O10

SR CA

LC

STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A

0=

HN
$$\frac{H}{N}$$
 $\frac{H}{N}$ \frac

Ph

__ NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 29 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 446311-49-5 REGISTRY

CN Glycinamide, L-.alpha.-glutamyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-aminopropyl)-, (1.fwdarw.8)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type ----- location ----- description
bridge Glu-1 - Gly-8 covalent bridge stereo Trp-4 - D

SEQ 1 EFWWKTFG

HITS AT: 2-8

MF C60 H75 N13 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A

0=

PAGE 1-B

Ho Me

$$H_{2N}$$
 $G(CH_2)_4$
 H_{2N}
 $G(CH_2)_4$
 H_{2N}
 $G(CH_2)_4$
 $G(CH_$

__NH2 **PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT** 1 REFERENCES IN FILE CA (1947 TO DATE) 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 1 REFERENCES IN FILE CAPLUS (1947 TO DATE) REFERENCE 1: 137:165559 L26 ANSWER 30 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN **446311-47-3** REGISTRY RN Glycinamide, N-[(2Z)-3-carboxy-1-oxo-2-propenyl]-L-phenylalanyl-Ltryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3aminopropyl) -, (1.fwdarw.7) -lactam (9CI) (CA INDEX NAME) PROTEIN SEQUENCE; STEREOSEARCH FS SQL NTE modified (modifications unspecified) type ----- location ----- description ______ bridge Phe-1 - Gly-7 covalent bridge stereo Trp-3 - D 1 FWWKTFG _____ HITS AT: 1-7 **RELATED SEQUENCES AVAILABLE WITH SEQLINK** MF C59 H70 N12 O10 SR CA LCSTN Files: CA, CAPLUS, TOXCENTER Absolute stereochemistry.

Double bond geometry as described by E or Z.

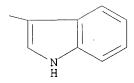
PAGE 1-A

Dh ...

0

PAGE 1-B

PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 31 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

446311-46-2 REGISTRY
Glycinamide, N-(2-carboxybenzoyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-CN L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-aminopropyl)-, (1.fwdarw.7)-lactam (9CI) (CA INDEX NAME)

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL

NTE modified (modifications unspecified)

----- location ----- description Phe-1 - Gly-7 bridge covalent bridge stereo Trp-3 D

SEO 1 FWWKTFG

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

C63 H72 N12 O10

SR CA

LCSTN Files: CA, CAPLUS, TOXCENTER

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

ANSWER 32 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN L26

446311-45-1 REGISTRY RN

Glycinamide, N-[(2-carboxycyclopropyl)carbonyl]-L-phenylalanyl-L-CN tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3aminopropyl) -, (1.fwdarw.7) -lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

NTE modified (modifications unspecified)

type	lo	cation	description	
bridge stereo	Phe-1 Trp-3	- Gly-7	covalent bridge D	

SEQ 1 FWWKTFG

HITS AT: 1-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C60 H72 N12 O10

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 137:165559

L26 ANSWER 33 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **425428-86-0** REGISTRY

CN Glycinamide, 3-(2-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9
NTE modified (modifications unspecified)

type	loc	ation	description	
bridge	Gly-2	- Gly-9	covalent bridge	
stereo	Ala-1	-	D	
stereo	Trp-5	-	D	

-SEQ 1 AGFWWKTFG

HITS AT: 3-9

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C71 H83 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-B

PAGE 2-A

 ${\rm HO}_{\rm R}$ Me

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 136:386384

L26 ANSWER 34 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

255850-87-4 REGISTRY
Glycinamide, (2S)-4-amino-2-[(6-deoxy-.alpha.-D-galactopyranos-6-CNyl)amino]butanoyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-Lthreonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (8.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

+				
type 	loc	ation -	description	
bridge uncommon ' stereo	Dab-1 Dab-1 Trp-4	- Gly-8 - -	covalent bridge - D	
			2	

SEQ

1 XFWWKTFG

HITS AT: 2-8

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C66 H85 N13 O15

SR

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

Absolute stereochemistry.

PAGE 1-A

0=

PAGE 1-B

DI

-NH₂

PAGE 2-B

2 REFERENCES IN FILE CA (1947 TO DATE) 2 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 136:341003

REFERENCE 2: 132:108301

L26 ANSWER 35 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **252845-48-0** REGISTRY

CN Glycinamide, 3-(1-naphthalenyl)-D-alanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3221

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

NTE modified (modifications unspecified)

type	loc	ation	description	
bridge stereo stereo	Gly-2 Ala-1 Trp-5	- Gly-9 - -	covalent bridge D D	

SEQ 1 AGFWWKTFG

HITS AT: 3-9

RELATED SEQUENCES AVAILABLE WITH SEQLINK MF C71 H83 N13 O10 S2

CA SR

STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC

Absolute stereochemistry.

PAGE 1-B

PAGE 2-A

 $\mathrm{HO}_{\mathrm{R}}\mathrm{Me}$

3 REFERENCES IN FILE CA (1947 TO DATE) 3 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:341003

REFERENCE 3: 132:50250

L26 ANSWER 36 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN

252845-47-9 REGISTRY Glycinamide, D-phenylalanyl-N-(2-mercaptoethyl)glycyl-L-phenylalanyl-Ltryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME) OTHER NAMES:

PTR 3219 CN

PROTEIN SEQUENCE; STEREOSEARCH FS

SQL 9

NTE modified (modifications unspecified)

type 	location		description			
bridge stereo stereo	Gly-2 Phe-1 Trp-5	- Gly-9 - -	covalent bridge D D			

SEQ 1. FGFWWKTFG

HITS AT: 3-9

MFC67 H81 N13 O10 S2

SR CA

STN Files: CA, CAPLUS, TOXCENTER, USPATFULL LC

Absolute stereochemistry.

PAGE 1-A

0=

PAGE 1-B

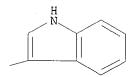
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Ph
  -NH<sub>2</sub>
                                           4 REFERENCES IN FILE CA (1947 TO DATE)
                                           4 REFERENCES IN FILE CAPLUS (1947 TO DATE)
 REFERENCE
                              1: 138:117735
 REFERENCE
                              2: 136:386384
 REFERENCE 3: 136:341003
 REFERENCE 4: 132:50250
 L26 ANSWER 37 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN
 RN
              252845-46-8 REGISTRY
              {\tt Glycinamide, N-(3-mercapto-1-oxopropyl)-L-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-L-tryptophyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenyl-D-phenyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-phenylalanyl-D-pheny
 CN
              tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic
               (1.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN PTR 3217
 FS
             PROTEIN SEQUENCE; STEREOSEARCH
 SOL 8
NTE modified (modifications unspecified)
 ______
  type ----- location ----- description
 bridge Mpa-1 - Gly-8 covalent bridge uncommon Mpa-1 - - - - - - D
 SEQ
                       1 XFWWKTFG
                               ======
HITS AT:
                              2-8
MF
             C57 H69 N11 O9 S2
SR
             CA
LC
             STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
```

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C



- 4 REFERENCES IN FILE CA (1947 TO DATE) 4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 138:117735

REFERENCE 2: 136:386384

Audet 734583-claim 3 and 4

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L26 ANSWER 38 OF 42 REGISTRY COPYRIGHT 2003.ACS on STN

RN

252845-45-7 REGISTRY Glycinamide, N-(2-mercaptoethyl)glycyl-L-phenylalanyl-L-tryptophyl-D-CN tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic

(1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

PTR 3213

PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

______ type ----- location ----- description ______ Gly-1 - Gly-8 covalent bridge Trp-4 - D bridge stereo Trp-4

SEQ 1 GFWWKTFG

====== HITS AT: 2-8

 ${\sf MF}$ C58 H72 N12 O9 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A

0=

PAGE 1-B

PAGE 1-C

Ph

<u></u> ~ C

-NH2

4 REFERENCES IN FILE CA (1947 TO DATE) 4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L26 ANSWER 39 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **252845-44-6** REGISTRY

CN Glycinamide, N-(mercaptoacetyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-

lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (1.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3211

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

NTE modified (modifications unspecified)

type	location		description	
bridge	Maa-1	- Gly-8	covalent bridge	
uncommon	Maa-1	-	-	
stereo	Trp-4	-	D	

SEQ 1 XFWWKTFG

=====

HITS AT: 2-8

MF C56 H67 N11 O9 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

4 REFERENCES IN FILE CA (1947 TO DATE)

4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

L26 ANSWER 40 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-43-5 REGISTRY

CN Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-

Audet 734583-claim 3 and 4

tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3207 FS PROTEIN

PROTEIN SEQUENCE; STEREOSEARCH

SQL S

NTE modified (modifications unspecified)

type 	lo	cation	description	
bridge stereo stereo	Cys-2 Phe-1 Trp-5	- Gly-9 - -	covalent bridge D D	

SEQ 1 FCFWWKTFG

HITS AT: 3-9

MF C66 H79 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 1-C

__ Me

PAGE 2-A

- 4 REFERENCES IN FILE CA (1947 TO DATE) 4 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 136:386384

REFERENCE 136:341003

REFERENCE 4: 132:50250

L26

RN

ANSWER 41 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN 252845-42-4 REGISTRY Glycinamide, L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-CN L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic

(1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

PTR 3197 CN

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL

NTE modified (modifications unspecified)

type	lc	cation	description	
bridge stereo	Cys-1 Trp-4	- Gly-8	covalent bridge D	

1 CFWWKTFG SEQ

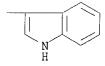
HITS AT: 2-8

MF C57 H70 N12 O9 S2

SR

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PAGE 1-B



7 REFERENCES IN FILE CA (1947 TO DATE)

7 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 136:386388

REFERENCE 3: 136:386384

REFERENCE 4: 136:341003

REFERENCE 5: 136:227293

REFERENCE 6: 136:151429

REFERENCE 7: 132:50250

L26 ANSWER 42 OF 42 REGISTRY COPYRIGHT 2003 ACS on STN

RN **252845-37-7** REGISTRY

CN Glycinamide, N-(4-amino-1-oxobutyl)-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(3-carboxypropyl)-, (7.fwdarw.1)-lactam (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3173

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8 NTE

type ----- location ----- description
bridge Oaa-1 - Gly-8 covalent bridge

uncommon Oaa-1 - - stereo Trp-4 - D

SEQ 1 XFWWKTFG

HITS AT: 2-8

MF C60 H74 N12 O10

SR CA

LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.

PAGE 1-A

0==

PAGE 1-B

HN
$$\frac{H}{N}$$
 $\frac{H}{N}$ \frac

PAGE 1-C

__NH2

8 REFERENCES IN FILE CA (1947 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

8 REFERENCES IN FILE CAPLUS (1947 TO DATE)

REFERENCE 1: 138:117735

REFERENCE 2: 137:165559

REFERENCE 3: 136:386384

REFERENCE 4: 136:341003

REFERENCE 5: 136:227293

REFERENCE 6: 135:313821

REFERENCE 7: 134:95704

REFERENCE 8: 132:50250

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

=>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=>
=> d stat que
L20
             42 SEA FILE=REGISTRY ABB=ON PLU=ON FWWKTFG/SQSP
L22
            11 SEA FILE=HCAPLUS ABB=ON PLU=ON L20
L23
           5224 SEA FILE=REGISTRY ABB=ON PLU=ON SOMATO?
L24
          89156 SEA FILE=HCAPLUS ABB=ON PLU=ON L23 OR ?SOMATO?
L25
            10 SEA FILE=HCAPLUS ABB=ON PLU=ON L22 AND L24
L27
            467 SEA FILE=REGISTRY ABB=ON PLU=ON [FA][YAF]WK[TVSC].[GAF]/SQSP
L34
            397 SEA FILE=REGISTRY ABB=ON
                                         PLU=ON L27 AND SQL>=7
            127 SEA FILE=REGISTRY ABB=ON PLU=ON L34 AND (CYCL? OR BRID? OR
L35
               MULTICHAI?)
L36
             46 SEA FILE=HCAPLUS ABB=ON PLU=ON L35
L37
             41 SEA FILE=HCAPLUS ABB=ON
                                        PLU=ON
                                                L36 AND L24
L38
             41 SEA FILE=HCAPLUS ABB=ON PLU=ON L37 NOT L25
L43
          15284 SEA FILE=REGISTRY ABB=ON PLU=ON
                                                [FA][YF].K[TVSC][GF]./SOSP
L44
         15240 SEA FILE=REGISTRY ABB=ON
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L54
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L55
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                                               L55 AND L24
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L57
L69
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L74
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L75
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               L75 OR L70)
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=> d ibib abs hitrn 180 1-13

L80 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:827035 HCAPLUS

DOCUMENT NUMBER: 136:210716

TITLE: A bicyclic and Hsst2 selective somatostatin analogue:

design, synthesis, conformational analysis and binding

Falb, Eliezer; Salitra, Yoseph; Yechezkel, Tamar; Bracha, Moshe; Litman, Pninit; Olender, Roberto; Rosenfeld, Rakefet; Senderowitz, Hanoch; Jiang,

Shaokai; Goodman, Murray

Peptor Ltd., Rehovot, 76326, Israel CORPORATE SOURCE:

Bioorganic & Medicinal Chemistry (2001), 9(12), SOURCE:

3255-3264

CODEN: BMECEP; ISSN: 0968-0896

PUBLISHER: Elsevier Science Ltd.

Journal DOCUMENT TYPE: LANGUAGE: English

AUTHOR(S):

A backbone bridged and disulfide bridged bicyclic somatostatin analog, compd. 1 (PTR-3205), was designed and synthesized by solid-phase methodol. The binding of compd. 1 to the five different somatostatin receptors, expressed in CHO or COS-7 cells, indicate a high degree of selectivity towards hsstr2. The three-dimensional structure of this compd. has been detd. in DMSO-d6 and in water by 1H NMR and by mol. dynamics simulations. Similar backbone conformations were obsd. in both solvents. The authors have established direct evidence that the backbone of this bicyclic somatostatin analog assumes a 'folded' conformation in soln., where the lactam ring extends roughly in the plane of the .beta.-turn. The pharmacophoric region Phe-(d)-Trp-Lys-Thr of compd. 1 is in accord with that of both the Veber compd. L-363,301 (Merck) and sandostatin. The authors believe that the enhanced selectivity towards the hsst2 receptor, in comparison with other analogs, is due to its large hydrophobic region, composed of the lactam ring and the Phe side chains at positions 1 and 8.

255872-38-9P 401912-36-5P TΤ

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(bicyclic and hsst2 selective somatostatin analog: design, synthesis,

conformational anal. and binding)

401912-42-3DP, resin bound ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(bicyclic and hsst2 selective somatostatin analog: design, synthesis, conformational anal. and binding)

32 REFERENCE COUNT:

THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

2000:65930 HCAPLUS ACCESSION NUMBER:

132:77604 DOCUMENT NUMBER:

Modulation of hormonal responses in animals with TITLE:

peptide vaccines

Gerraty, Norman L.; Westbrook, Simon L.; Kingston, INVENTOR(S):

David J.

Northstar Biologicals Pty. Ltd., Australia PATENT ASSIGNEE(S):

S. African, 137 pp. SOURCE:

CODEN: SFXXAB

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. ____ ______ ZA 1997-10584 19971125 ZA 1997-10584 19971125 ZA 9710584 19980819 PRIORITY APPLN. INFO.:

The authors disclose non-naturally occurring peptides with amino acid sequences derived from, or similar to, the native animal hormone, hormone-binding protein or receptor for hormone. These peptides are capable of eliciting a humoral immune response that modulates the activity of the native hormone or receptor in vivo. In one example, immunization of pregnant sows with a peptide based on somatostatin receptors, increased their liveweight gain and prodn. of milk at lactation. Immunization of piglets with the somatostatin receptor peptide increased their liveweight gain. In a second example, immunization of pregnant ewes resulted in greater liveweight gain of their lambs and, in addn., the wool follicle d. was significantly higher in the lambs.

IT 253791-02-5

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(immunization with peptides of animal hormones, their binding proteins, or receptors for immunol. control of endocrine function)

L80 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:53668 HCAPLUS

DOCUMENT NUMBER: 132:108301

TITLE: Processes for coupling amino acids using

bis(trichloromethyl) carbonate

INVENTOR(S): Falb, Eliezer; Yechezkel, Tamar; Salitra, Yoseph

PATENT ASSIGNEE(S): Peptor Ltd., Israel SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                            KIND DATE
                                                         APPLICATION NO. DATE
                                     ____
       _____ ____
      WO 2000002898
                            A1 20000120
                                                        WO 1999-IL378 19990711
           W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
                 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UG, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
                 MD, RU, TJ, TM
           RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      CA 2334076
                             AA
                                      20000120
                                                      CA 1999-2334076
                                                                                19990711
                                                          AU 1999-46454
      AU 9946454
                               Α1
                                      20000201
                                                                                 19990711
      AU 754560
                               B2
                                      20021121
                                                         EP 1999-929678
                                                                                 19990711
      EP 1097164
                              A1
                                      20010509
                 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
                                      20020709
                                                          JP 2000-559127
                             T2
                                                                                  19990711
       JP 2002520331
                                                          NZ 1999-509304
                                                                                 19990711
      NZ 509304
                               Α
                                      20030131
                                      20010705
                                                          US 2001-756223
                                                                                  20010109
      US 2001007037
                               A1
                              В2
                                      20030128
      US 6512092
                                                      IL 1998-125314 A 19980712
PRIORITY APPLN. INFO.:
                                                      WO 1999-IL378
                                                                            W 19990711
```

OTHER SOURCE(S): CASREACT 132:108301

AB A process is disclosed for using triphosgene as an efficient and effective coupling reagent during peptide synthesis, by in situ generation of amino acid chloride from a protected amino acid. This process is particularly useful for the coupling to sterically hindered amino acid residues or for other difficult couplings. Furthermore, the same reagent can be used for the derivatization of peptides by formation of an amide bond between a free amine on a peptide and a carboxylic acid or for the coupling of an amino acid to a solid support. Results for difficult peptide couplings using triphosgene are tabulated.

IT 255872-38-9P, PTR 3205 255872-39-0P, PTR 3227

RL: SPN (Synthetic preparation); PREP (Preparation)

(processes for coupling amino acids using bis(trichloromethyl)

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L80 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

1997:776177 HCAPLUS ACCESSION NUMBER:

128:33788 DOCUMENT NUMBER:

Modulating the activity of hormones or their receptors TITLE:

- peptides, antibodies, vaccines and uses thereof

Gerraty, Norman L.; Westbrook, Simon L.; Kingston, INVENTOR(S):

David J.

Northstar Biologicals Pty. Ltd., Australia; Gerraty, PATENT ASSIGNEE(S):

Norman L.; Westbrook, Simon L.; Kingston, David J.

PCT Int. Appl., 139 pp. SOURCE:

CODEN: PIXXD2

Patent DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	CENT I	NO.		KII	ND	DATE					CATI		o.	DATE	_		
WO.	9744	 352		 A	 L	1997	1127							1997	0522		
,,,	W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,
		DK.	EE,	ES,	FI,	GB,	GE,	GH,	HU,	IL,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,
		VN.	YU,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM					
	RW:	GH,	KE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FΙ,	FR,	GB,
		GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		MT.	MR.	NE.	SN.	TD.	ΤG										
AU	9727	575		A.	1	1997	1209		Α	U 19	97-2	7575		1997	0522		
ΑIJ	7385.	28		B:	2	2001	0920										
CN	1226 9709	896		Α		1999	0825		C	N 19	97-1	9652	4	1997			
BR	9709	038		Α		2000	0104		. В	R 19	97-9	038		1997			
ΕP	1012	171		A.	1	2000	0628		E	P 19	97-9	2152	9	1997	0522		
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	FI														
NZ	3329 2000 3372	26		Α		2000	0825		N				-	1997			
JP	2000	5121	30	\mathbf{T}	2	2000	0919		J		97-5			1997			
114	3312	J 0									97-3			1997			
US	2002	1071	87	A	1	2002	8080				01-7		-	2001	-		
, US	2002	1691	16	A	1	2002	1114		U	S 20	01-7	5842	6	2001	0112		
US	2002	1879	25·	Α	1	2002	1212		U	S 20	01-7	5819	8	2001	0112		
	2003				1 .	2003	0306		U	S 20	01-8	9T 6 6	Τ_	2001	0522		
ORIT	Y APP	LN.	INFO	.:										1996			
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This invention relates to immunogenic, non-naturally occurring peptides AR and immunol. reactive mols. derived from animal hormone, carrier protein, hormone binding protein or hormone receptor wherein the peptide is capable of eliciting antibodies to modulate the activity of hormone or receptor in vivo. These peptides are based on e.g. portions of somatostatin, somatostatin receptors and insulin-like growth factor binding protein. Methods of modulating hormonal activity in an animal to increase prodn. of fiber or milk are disclosed. Compns. and vaccine comprising these peptides are also contemplated.

199800-54-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(peptides, antibodies, vaccines for modulating hormones or hormone - receptor activity in animal)

L80 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:547527 HCAPLUS

DOCUMENT NUMBER: 107:

107:147527

TITLE: St

Structure-activity studies of somatostatin analogs,

substituted at positions 4 and 5

AUTHOR(S): Sarantakis, D.

CORPORATE SOURCE: SOURCE:

Res. Div., Wyeth Lab., Philadelphia, PA, 19101, USA Pept., Proc. Eur. Pept. Symp., 19th (1987), Meeting

Date 1986, 535-8. Editor(s): Theodoropoulos, Dimitrios. de Gruyter: Berlin, Fed. Rep. Ger.

CODEN: 56ABA8 -

DOCUMENT TYPE:

Conference

LANGUAGE:

English

AB Somatostatin analogs, substituted at positions 4 and 5, were tested for their abilities to inhibit the release of growth hormone, insulin, and glucagon. Structure-activity relations are discussed for the analogs with regard to specificity and duration of biol. activity. Structural variations included substitutions with neutral and(or) basic amino acids, substitutions with D-amino acids, and mol. size (cyclic peptides).

IT **79698-22-9**

RL: BIOL (Biological study)

(glucagon and growth hormone and insulin secretion inhibition by, structure in relation to)

L80 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1987:770 HCAPLUS

DOCUMENT NUMBER:

106:770

TITLE:

Chemistry and pharmacology of SMS 201-995, a

long-acting octapeptide analog of somatostatin AUTHOR(S): Pless, Janos; Bauer, Wilfried; Briner, Ulrich;

Doepfner, Wolfgang; Marbach, Peter; Maurer, Richard; Petcher, Trevor J.; Reubi, Jean Claude; Vonderscher,

Jacky

CORPORATE SOURCE:

Preclin. Res. Dep., SANDOZ Ltd., Basel, CH-4002,

Switz.

SOURCE:

International Congress Series (1986),

683 (Endocrinology '85), 319-33 CODEN: EXMDA4; ISSN: 0531-5131

DOCUMENT TYPE:

Journal English

LANGUAGE:

AB Examn. of the structure-activity relations of a no. of somatostatin [38916-34-6] analogs led to the development of the potent selective, and long-acting analog SMS 201-995 (I) [83150-76-9]. I was resistant to degrdn. by rat brain or kidney homogenates, porcine gastric juice, or scrapings from rat intestinal mucosa. I selectively inhibited growth [9002-72-6] secretion for .ltoreq.6 h after s.c. hormone (GH) administration to several species and exhibited favorable GH/insulin [9004-10-8] and GH/glucagon [9007-92-5] ratios in rhesus monkeys. Addnl., I bound with high affinity to somatostatin receptors in rat pituitary and hamster pancreatic .beta.-cells and labeled a subset of somatostatin receptors in rat cortex. In Syrian hamsters with transplanted insulinomas, I inhibited the tumor growth and radiolabeled I bound to somatostatin receptors in 'rat brain and a human gonadotropin-releasing factor [9034-40-6]-secreting tumor of the jejunum. The stability and long duration of I may be useful in examn. of the therapeutic usefulness of somatostatin in various diseases esp. acromegaly, gastrointestinal tumors, and juvenile-onset diabetes.

IT 79486-62-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (biol. activity of, mol. structure in relation to)

L80 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1984:449288 HCAPLUS

DOCUMENT NUMBER: 101:49288

TITLE: Octapeptides as antiulcer agents

INVENTOR(S): Lien, Eric L.

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE: U.S., 3 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				-
US 4443434	A	19840417	US 1982-409255	19820818
PRIORITY APPLA INFO.	•		US 1982-409255	19820818

AB The octapeptides, Phe-Cys-(SA)-Phe-D-Trp-Lys-Thr-Cys(SA)-Phe (where A = H or SA = dithioether bond) (I) and salts inhibit gastric and pancreatic secretions and reduce gastrointestinal blood flow in treatment of peptic

ulcer disease, acute pancreatitis and Zollinger-Ellison preoperational therapy. Thus, an octapeptide (I, the 2 SA groups = 2-7 disulfide bond) [79698-22-9] was injected into rats at 1 mg/kg. Thirty minutes following the start of the expt., 20 .mu.Ci/rat of 86RbCl was injected i.v. The rats were killed 20 s later by injection of Nembutal. The blood flow to the stomach was detd. by counting 86Rb in the dissected stomachs of the rats. The octapeptide decreases the gastrointestinal blood flow comparably to somatostatin.

ΙT 79698-22-9

> RL: BIOL (Biological study) (ulcer treatment with)

L80 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1984:68700 HCAPLUS

DOCUMENT NUMBER:

100:68700

TITLE:

Structure-activity relationships of highly potent and

specific octapeptide analogs of somatostatin

AUTHOR(S):

Bauer, Wilfried; Briner, Ulrich; Doepfner, Wolfgang;

Haller, Roland; Huguenin, Rene; Marbach, Peter;

Petcher, Trevor J.; Pless, Janos

CORPORATE SOURCE:

Preclin. Res. Dep., Sandoz Ltd., Basel, CH-4002,

Switz.

SOURCE:

Pept., Proc. Eur. Pept. Symp., 17th (1983), Meeting Date 1982, 583-8. Editor(s): Blaha, Karel; Malon,

Petr. de Gruyter: Berlin, Fed. Rep. Ger.

CODEN: 50GFAA

DOCUMENT TYPE:

Conference

LANGUAGE:

English

For diagram(s), see printed CA Issue. GΙ

Somatostatin octapeptide analogs I [X = H, D-Phe; Y = NH2, D-Ser(NH2), AB D-Thr(NH2), Ser(ol), Phe(ol), D-Thr(ol), Thr(ol)] were prepd. and their growth hormone inhibitory activities were detd. I [X = D-Phe, Y = Thr(ol)] showed the highest activity, selectivity, and longest duration of

action. ΙT 88463-68-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and cyclization of)

IT 88463-63-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and deprotection of)

79486-62-7P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and growth hormone inhibitory activity of)

L80 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

1984:23016 HCAPLUS

DOCUMENT NUMBER:

100:23016

TITLE:

Polypeptides, their pharmaceutical compositions and

their use

INVENTOR(S):

Bauer, Wilfried; Pless, Janos

PATENT ASSIGNEE(S):

Sandoz A.-G., Switz.

SOURCE:

U.S., 10 pp. Cont.-in-part of U.S. Ser. No. 20

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE ____ ______ 19811116 US 1981-321663 19830726 US 4395403 Α

ZA 8007421 A 19820728 ZA 1980-7421 19801127
PRIORITY APPLN. INFO.: CH 1979-10524 19791127
CH 1980-4574 19800613
US 1980-208888 19801121

For diagram(s), see printed CA Issue. Peptides I [R = C1-12 alkyl, C7-10 phenylalkyl, R5CO (R5 = H, C1-11 alkyl, AΒ Ph, C7-10 phenylalkyl), D- or L-aminoacyl, dipeptidyl; R1 = H, C1-12 alkyl, C7-10 phenylalkyl; X = (un)substituted Phe; X1 = D- or L-Trp, N.alpha.-methylated and/or benzene-ring-substituted D- or L-Trp; X2 = Lys, N.alpha.-methylated and/or N.epsilon.-C1-3 alkylated Lys; X3 = Thr, Ala, MeAla, MeThr, R2 = R3 = H, R2R3 = bond; R4 = CO2R6 (R6 = H, C1-3 alkyl), CH2OR7 (R7 = H, ester group), CONR8R9 [R8 = H, C1-3 alkyl, Ph, CH2Ph, C9-10 phenylalkyl; R9 = H, C1-3 alkyl, CHR10R11 [R10 = H, (CH2) nOH (n = 1, 2, 3), CHMeOH, CH2CHMe2, CH2Ph; R11 = CO2R6 (R6 = same), CH2OR7 (R7 = $\frac{1}{2}$ same), CONR12R13 (R12 = H, C1-3 alkyl; R13 = H, C1-3 alkyl, Ph, C7-10 phenylalkyl, CHR10R11)], CO-Pro-R14 [R14 = OR6 (R6 = same), NR12R13 (R12, R13 = same)], (un)esterified CO-Pro-ol] were prepd. as agents for inhibiting the release of growth hormone and gastric and pancreatic secretions. Thus, Z-Lys(Boc)-Thr-OMe (Z = PhCH2O2C, Boc = CO2CMe3) was Z-deblocked by hydrogenolysis and then coupled with Z-Phe-D-Tryp-OH by DCC/1-hydroxybenzotriazole (HOBt) in DMF to give Z-Phe-D-Trep-Lys(Boc)-Thr-OMe, which was Z-deblocked by hydrogenolysis and then coupled with Boc-D-Phe-Cys(MBzl)-OH (MBzl = CH2C6H4OMe-p) by DCC/HOBt in DMF to give Boc-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(Boc)-Thr-R15 (II, R15 = OMe), which was converted to II (R15 = NHNH2) (III). Boc-Cys(MBzl) was coupled with H-Thr-ol.HCl by ClCO2CH2CHMe2 in THF contg. N-methylmorpholine to give Boc-Cys(MBzl)-Thr-ol, which was Boc-deblocked and then coupled with III by the azide method to give Boc-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(Boc)-Thr-Cys(MBzl)-Thr-ol, which was deblocked and cyclized to give cyclic disulfide IV. IV had an ID50 of 0.09 .mu.g/kg (i.v.) for the inhibition of gastric juice secretion in rats.

IT 79486-63-8P

L80 ANSWER 10 OF 13 · HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:4797 HCAPLUS

DOCUMENT NUMBER: 98:4797

TITLE: Polypeptides and their use as drugs

INVENTOR(S): Bauer, Wilfried; Pless, Janos

PATENT ASSIGNEE(S): Sandoz A.-G., Switz.

SOURCE: Belg., 27 pp. CODEN: BEXXAL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 892315	A1	19820901	BE 1982-10440	19820301
CH 647246	А	19850115	CH 1981-1531	19810306
DK 8200810	Α	19820907	DK 1982-810	19820224
FT 8200689	А	19820907	FI 1982-689	19820226
FR 2501199	A1	19820910	FR 1982-3475	19820301
FR 2501199	В1	19860221		
DE 3207311	A1	19821202	DE 1982-3207311	19820301
GB 2095261	A	19820929	GB 1982-6136	19820302
GB 2095261	В2	19840815		
NL 8200828	А	19821001	NL 1982-828	19820302
US 4435385	A	19840306	US 1982-353900	19820302
SE 8201339	A	19820907	SE 1982-1339	19820304
CA 1188682	A1 ·	19850611	CA 1982-397561	19820304

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IL 1982-65167
                                                             19820304
     IL 65167
                       A1
                            19850630
                                            AU 1982-81164
                                                             19820305
                       Α1
                            19820909
    AU 8281164
                                            JP 1982-35698
                                                             19820305
                       Α2
                            19820930
     JP 57158745
     JP 03063559
                       B4
                            19911001
     ES 510167
                       Α1
                            19831016
                                            ES 1982-510167
                                                             19820305
                                            ZA 1982-1491
                                                             19820305
     ZA 8201491
                       A
                            19831026
                                            HU 1982-690
                                                             19820305
     HU 28423
                       0
                            19831228
                            19850301
                                            ES 1983-522916
                                                             19830601
     ES 522916
                       A1
PRIORITY APPLN. INFO.:
                                         CH 1981-1531
                                                             19810306
                                         CH 1981-5723
                                                             19810904
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GI For diagram(s), see printed CA Issue.

Peptides RR1NCHR2CONHCH(CH2SR4)CO-Phe-Trp-Lys-X-NHCHR3CH2SR5 [R = inorg. or org. acyl group, R1 = H, alkyl, NCHR2CO moiety = L- or D-Phe (optionally ring substituted by halo, NO2, OH, alkyl, alkoxy); Phe, Trp (D or L) may be ring substituted by NO2, NH2, OH, alkyl, alkoxy; Lys may be .alpha.-N-methylated and .epsilon.-N-alkylated; X = D- or L-.alpha.-amino acid residue optionally .alpha.-N-methylated; R3 = CO2H, CH2OH, carbamoyl, R4 = R5 = H, R4R5 = bond] were prepd. and they control the secretion of somatotropin and inhibit gastric and pancreatic secretion (no data). I was prepd. by deprotection-oxidn. of Me(CH2)8CO-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(Z)-Thr-Cys(MBzl)-Thr-ol (MBzl = p-MeOC6H4CH2, Z = PhCH2O2C), which was prepd. by peptide coupling in soln.

IT 83795-90-8P

L80 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1982:575266 HCAPLUS

DOCUMENT NUMBER: 97:175266

TITLE: SMS 201-995: a very potent and selective octapeptide

analog of somatostatin with prolonged action

AUTHOR(S): Bauer, Wilfried; Briner, Ulrich; Doepfner, Wolfgang;

Haller, Roland; Huguenin, Rene; Marbach, Peter;

Petcher, Trevor J.; Pless, Janos

CORPORATE SOURCE: Preclin. Res., Sandoz Ltd., Basel, 4002, Switz.

SOURCE: Life Sciences (1982), 31(11), 1133-40

CODEN: LIFSAK; ISSN: 0024-3205

DOCUMENT TYPE: Journal LANGUAGE: English

AB Cyclic H-D-Phe-Cys-Phe-D-Trp-Lys-Thr-Cys-Thr(ol) (SMS 201-995) [83150-76-9] in vitro is 3 times more potent than the native hormone in inhibiting the secretion of growth hormone. SMS 201-995 is highly resistant to degrdn. by pure enzymes and by tissue homogenates. In vivo in rat and rhesus monkey it is at least 20 times more active than somatostatin [38916-34-6], is much longer acting, and in both species is much more selective in inhibiting the secretion of growth hormone than that of insulin. The compd. is active by several routes of administration including oral and is well-tolerated both in lab. animals and in man.

IT 83214-21-5

RL: BIOL (Biological study)

(somatostatin-like activity of, mol. structure in relation to)

L80 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:587683 HCAPLUS

DOCUMENT NUMBER: 95:187683

TITLE: Octapeptides lowering growth hormone

INVENTOR(S): Sarantakis, Dimitrios

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE: U.S., 4 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4282143	A	19810804	US 1980-159327	19800613
US 4328135	A	19820504	US 1981-233813	19810212
PRIORITY APPLN. IN	· · · · · · · · · · · · · · · · · · ·		US 1980-159327	19800613

GI For diagram(s), see printed CA Issue.

R-Cys(R1)-X-X1-Lys-X2-Cys(R2)-R3 (I; R = H-Phe, H-D-Phe, PhCH2CH2CO; R1 = R2 = H, R1R2 = bond; X = Phe, Tyr, Trp, Met, Leu; X1 = Trp, D-Trp; X2 = Thr, Val, NHCHEtCO, Phe; R3 = Phe-OH, D-Phe-OH, NHCH2CH2Ph) were prepd. I inhibited the release of growth hormone (GH) without materially altering blood serum levels of glucagon or insulin. Thus, Me3CO2C-Phe-Cys(MBzl)-Phe-D-Trp-Lys(CO2CH2C6H4Cl-2)-Thr(CH2Ph)-Cys(MBzl)-D-Phe-OCH2-resin (MBzl = CH2C6H4OMe-p) was prepd. by the stepwise solid-phase method and then it was resin cleaved and deblocked by HF/anisole to give the linear octapeptide, which was cyclized by oxidn. with K3Fe(CN)6 to give octapeptide cyclic disulfide II. II at 20 .mu.g/kg (s.c.) lowered blood serum levels of GH in rats from 277 mg/mL to 56 ng/mL without significantly altering the levels of glucagon or insulin.

IT 79698-22-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and growth hormone release-inhibiting activity of)

IT 79698-23-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and oxidative cyclization of)

IT 79698-21-8DP, resin-bound

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. and resin-cleavage and deblocking of)

L80 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1981:587679 HCAPLUS

DOCUMENT NUMBER: 95:187679

TITLE: Polypeptides, pharmaceutical compositions comprising

said polypeptides and their use

INVENTOR(S): Bauer, Wilfried; Pless, Janos

PATENT ASSIGNEE(S): Sandoz A.-G., Switz. SOURCE: Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	ENT NO.		KIND	DATE		API	PLICATION NO.	DATE
								
EΡ	29579		A1	19810603		EΡ	1980-107181	19801119
EΡ	29579		В1	19830216				
	R: AT,	BE,	CH, DE	, FR, GB,	IT,	LU, N	NL, SE	
AT	2512		E	19830315	•	AT	1980-107181	19801119
FI	8003634		A	19810528		FI	1980-3634	19801121
FI	72981		В	19870430				
FI	72981		С	19870810				
DK	8005019		A	19810528		DK	1980-5019	19801125
DK	150146		В	19861215				
DK	150146		С	19870601				
AU	8064688		A1	19810604		AU	1980-64688	19801125
ΑU	543198		B2	19850404			4	
	497113		A1	19821201		ES	1980-497113	19801125
	30257		0	19840328		HU	1980-2817	19801125
	185920		В	19850428				
	1182109		A1	19850205		CA	1980-365399	19801125
O1 1								

IL 615	61	A1	19850228		1980-61561	19801125
CS 228	140	P	19840514		3 1980-8184	19801126
JP 630	51159	B4	19881013	JE	1980-167364	19801126
JP 560	90048	A2	19810721			
ZA 800	7421	А	19820728	ZF	1980-7421	19801127
ES 510		A1	19830416	ES	3 1982-510751	19820324
JP 632	34000	A2	19880929	JI	9 1988-57316	19880308
PRIORITY AP				CH 19	979-10524	19791127
INIONIII III				CH 19	80-4574	19800613
					980-107181	19801119

For diagram(s), see printed CA Issue. Peptides RR1NCH(CH2SR2)CO-X-X1-X2-X3-NHCH(CH2SR3)CHR4 [I; R = H, C1-12 alkyl, C1-10 phenylalkyl, R5CO (R5 = H, C1-11 alkyl, Ph, C7-10 phenylalkyl), L- or D-amino acid residue, dipeptide residue, or L- or D-phenylalanine residue optionally ring-substituted by halo, NO2, NH2, OH, C1-3 alkyl, and/or alkoxy; R1 = H, C1-12 alkyl, C7-10 phenylalkyl; R2 = R3 = H; R2R3 = bond; X = Phe optionally ring-substituted by halo, NO2, NH2, OH, C1-3 alkyl, and/or C1-3 alkoxy; X1 = L- or D-Trp optionally N.alpha.-methylated and optionally ring-substituted by NO2, NH2, OH, C1-3 alkyl, and/or C1-3 alkoxy; X2 = Lys optionally N.alpha.-methylated and optionally substituted at .epsilon.-NH2 by C1-3 alkyl; X3 = L- or D-amino acid residue optionally N.alpha.-methylated; R4 = CO2R6 (R6 = H, C1-3 alkyl), CH2OR7 (R7 = H, hydrolyzable ester residue), CONR8R9 [R8 = H, C1-3alkyl, Ph, C7-10 phenylalkyl; R9 = H, C1-3 alkyl, CHR10R11 [R10 = H, (CH2) nOH (n = 2, 3), or a substituent attached to the .alpha.-carbon of an .alpha.-amino acid; R11 = CO2R6 (R6 = same), CH2OR7 (R7 = same), CONR12R13 $(R12 = H, C1-3 \text{ alkyl}; R13 = H, C1-3 \text{ alkyl}, Ph, C7-10 phenylalkyl})]],$ pyrrolidine residue R14 (R11 = same)] were prepd. as inhibitors of the release of growth hormone (GH) and inhibitors of gastric and pancreatic secretions. I can be used in the treatment of diabetes and acromegaly, which are assocd. with excess GH secretion. Thus, Z-Lys(BOC)-Thr-OMe (Z=PhCH2O2C, BOC = CO2CMe3) was Z-deblocked by hydrogenolysis and then coupled to Z-Phe-D-Trp-OH by dicyclohexylcarbodiimide(DDC)/1hydroxybenzotriazole(HOBT) to give Z-Phe-D-Trp-Lys(BOC)-Thr-OMe, which was Z-deblocked and then coupled to BOC-D-Phe-Cys(MBzl)-OH (MBzl = CH2C6H4OMe-p) by DCC/HOBT to give the protected hexapeptide Me ester, which was treated with NH2NH2 to give BOC-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(BOC)-Thr-NHNH2 (II). BOC-Cys(MBzl)-OH was coupled to threoninol (H-Thr-ol) to give BOC-Cys(MBzl)-Thr-ol, which was BOC-deblocked and then coupled to II by the azide method to give BOC-D-Phe-Cys(MBzl)-Phe-D-Trp-Lys(BOC)-Thr-Cys(MBzl)-Thr-ol, which was deblocked by CF3CO2H/thioanisole and boron tris(trifluoroacetate)/CF3CO2H and then cyclized by air oxidn. to give cyclic peptide III. I in daily doses of $0.002-20~\mathrm{mg}$ can be used for the treatment of gastrointestinal disorders.

IT **79486-63-8P**

GΙ

AB

=> select hitrn 180 1-13
'HITRN' IS NOT A VALID FIELD CODE FOR FILE 'HCAPLUS'
ENTER DISPLAY CODE (TI) OR ?:end

=> select hit rn 180 1-13 E392 THROUGH E406 ASSIGNED

=> fil reg FILE 'REGISTRY' ENTERED AT 11:53:06 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d his 181

(FILE 'HCAPLUS' ENTERED AT 11:52:25 ON 22 JUL 2003) SELECT HIT RN L80 1-13

FILE 'REGISTRY' ENTERED AT 11:53:06 ON 22 JUL 2003 L81 15 S E392-E406

=> =>

=> d .seq 181 1-15

L81 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN **401912-42-3** REGISTRY

CN L-Phenylalaninamide, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-N-[4-oxo-4-(2-propenyloxy)butyl]-L-phenylalanyl-S-[(acetylamino)methyl]-L-cysteinyl-L-phenylalanyl-1-[(1,1-dimethylethoxy)carbonyl]-D-tryptophyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-O-(1,1-dimethylethyl)-L-threonyl-S-[(acetylamino)methyl]-L-cysteinyl-N.alpha.-[3-[[(2-propenyloxy)carbonyl]amino]propyl]- (9CI) (CA INDEX NAME)

NTE modified

----- location ----- description _____ terminal mod. Phe-8 modification Phe-1 modification Phe-1 C-terminal amide undetermine (9h-fluoren-9-ylmethon, (acetylamino)methyl<Acm>
-dimethylethoxy) carl undetermined modification (9h-fluoren-9-ylmethoxy) carbonyl Cys-2 modification Trp-4 modification (1,1-dimethylethoxy) carbonyl<Boc> (1,1-dimethylethoxy) carbonyl<Boc> Lys-5 modification modification Thr-6 1,1-dimethylethyl<t-Bu> modification Cys-7 (acetylamino)methyl<Acm> undetermined modification modification Phe-8

SQL 8 ·

RN 401912-42-3 REGISTRY

REFERENCE 1: 136:210716

L81 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN

RN **401912-36-5** REGISTRY

CN L-Phenylalaninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-D-cysteinyl-N.alpha.-(3-aminopropyl)-, (1.fwdarw.8)-lactam, cyclic (2.fwdarw.7)-disulfide (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

```
------
type ----- location ----- description
- Phe-8 covalent bridge
- Cys-7 disulfide bridge
             Phe-1
          Phe-1
Cys-2 - Cys-7 di
Trp-4 - D
Cys-7 - D
bridge
stereo
stereo
SQL 8
RN 401912-36-5 REGISTRY
        1: 136:210716
REFERENCE
L81 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
    255872-39-0 REGISTRY
RN
    L-Lysinamide, D-phenylalanyl-N-(2-carboxyethyl)glycyl-N-(2-carboxyethyl)-L-
CN
    phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-
    cysteinyl-N-(2-aminoethyl)-L-phenylalanyl-, (2.fwdarw.11),(3.fwdarw.10)-
    dilactam, cyclic (4.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)
OTHER NAMES:
   PTR 3227
NTE modified (modifications unspecified)
______
               ----- location ----- description
bridge Gly-2 - Lys-11 covalent bridge bridge Phe-3 - Phe-10 covalent bridge bridge Cys-4 - Cys-9 disulfide bridge stereo Phe-1 - D stereo Trp-6 - D
SQL 11
RN 255872-39-0 REGISTRY
REFERENCE 1: 132:108301
L81 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
    255872-38-9 REGISTRY
RN
    L-Phenylalaninamide, N-(3-carboxypropyl)-L-phenylalanyl-L-cysteinyl-L-
CN
    phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-N.alpha.-(3-
    aminopropyl)-, (1.fwdarw.8)-lactam, cyclic (2.fwdarw.7)-disulfide (9CI)
     (CA INDEX NAME)
OTHER NAMES:
CN PTR 3205
NTE modified (modifications unspecified)
------
 type ----- location ----- description
bridge Phe-1 - Phe-8 covalent bridge bridge Cys-2 - Cys-7 disulfide bridge stereo Trp-4 - D
stereo
RN 255872-38-9 REGISTRY
REFERENCE 1: 136:210716
REFERENCE 2: 132:108301
L81 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
     253791-02-5 REGISTRY
RN
     L-Cysteine, L-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-L-lysyl-
CN
     L-threonyl-L-cysteinyl-L-phenylalanyl-, cyclic (2.fwdarw.7)-disulfide
```

```
(9CI) (CA INDEX NAME)
NTE
              ----- location ----- description
                                         ______
bridge Cys-2 - Cys-7 disulfide bridge
                  ______
SQL 9
RN
        253791-02-5 REGISTRY
REFERENCE 1: 132:77604
        ANSWER 6 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
L81
        199800-54-9 REGISTRY L-Cysteine, L-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-L-lysyl-
RN
CN
        L-threonyl-L-cysteinyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
SQL
RN
        199800-54-9 REGISTRY
REFERENCE 1: 128:33788
L81 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
RN
        88463-68-7 REGISTRY
        L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-
        lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-phenylethyl]-, (S)- (9CI) (CA
         INDEX NAME)
NTE modified (modifications unspecified)
______
 type ----- location ----- description
______
modification Phe-8 -
                                                                      undetermined modification
RN 88463-68-7 REGISTRY
REFERENCE 1: 100:68700
L81 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
RN
        88463-63-2 REGISTRY
        L-Cysteinamide, \ N-[(1,1-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl]-D-phenylalanyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbonyl-S-[(4-dimethylethoxy)carbony
CN
        methoxyphenyl)methyl]-L-cysteinyl-L-phenylalanyl-D-tryptophyl-N6-[(1,1-
         dimethylethoxy)carbonyl]-L-lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-
        phenylethyl]-S-[(4-methoxyphenyl)methyl]-, (S)- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)
------
 type ----- location ----- description
_____
modification Phe-1 -
modification Cys-2 -
modification Lys-5 -
modification Cys-7 -
modification Phe-8 -
                                                                         (1,1-dimethylethoxy) carbonyl<Boc>
                                                                  SQL 8
RN
        88463-63-2 REGISTRY
REFERENCE 1: 100:68700
        ANSWER 9 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
L81
RN
         83795-90-8 REGISTRY
         L-Phenylalanine, N-(1-oxotetradecyl)-D-phenylalanyl-L-cysteinyl-L-
CN
         phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-L-cysteinyl-, methyl ester,
         cyclic (2.fwdarw.7)-disulfide, monoacetate (salt) (9CI) (CA INDEX NAME)
```

OTHER CA INDEX NAMES: CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv. NTE modified (modifications unspecified) _____ ----- location ----- description type _____ bridge Cys-2 - Cys-7 disulfide bridge modification - undetermined modification modification Phe-1 - undetermined modification _____ SQL 8 83795-90-8 REGISTRY RN REFERENCE 1: 98:4797 L81 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN 83214-21-5 REGISTRY RN L-Phenylalanine, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-CN lysyl-L-threonyl-L-cysteinyl-, cyclic (2.fwdarw.7)-disulfide (9CI) INDEX NAME) OTHER CA INDEX NAMES: 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv. CN ----- location ----- description ______ bridge Cys-2 - Cys-7 disulfide bridge _____ RN **83214-21-5** REGISTRY REFERENCE 1: 97:175266 L81 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN **79698-23-0** REGISTRY RN CN D-Phenylalanine, N-[N-[N-[N-[N-[N-(N-L-phenylalanyl-L-cysteinyl)-Lphenylalanyl]-D-tryptophyl]-L-lysyl]-L-threonyl]-L-cysteinyl]- (9CI) INDEX NAME) SOL 79698-23-0 REGISTRY RN REFERENCE 1: 95:187683 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN L81 79698-22-9 REGISTRY RN D-Phenylalanine, L-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-CN lysyl-L-threonyl-L-cysteinyl-, cyclic (2.fwdarw.7)-disulfide (9CI) INDEX NAME) OTHER CA INDEX NAMES: CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv. NTE ----- location ----- description type _____ bridge Cys-2 - Cys-7 disulfide bridge ______ SQL 8 **79698-22-9** REGISTRY REFERENCE 1: 107:147527 REFERENCE 2: 101:49288

```
REFERENCE
                                  3: 95:187683
              ANSWER 13 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
 L81
               79698-21-8 REGISTRY
 RN
               CN
               [N-[N-[(1,1-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-L-phenylalanyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylethoxy)carbonyl]-S-[(4-dimethylet
               methoxyphenyl)methyl]-L-cysteinyl]-L-phenylalanyl]-D-tryptophyl]-L-lysyl]-
               O-(phenylmethyl)-L-threonyl]-S-[(4-methoxyphenyl)methyl]-L-cysteinyl]-
               (9CI) (CA INDEX NAME)
 NTE modified (modifications unspecified)
                        ----- location ----- description
   type
modification Phe-1 -
modification Cys-2 -
modification Lys-5 -
modification Cys-2 - (4-methoxyphenyl)methyl<MOB>
modification Lys-5 - [(2-chlorophenyl)methoxy]
carbonyl<2CZ>
modification Thr-6 - phenylmethyl<Bzl>
modification Cys-7 - (4-methoxyphenyl)methyl<MOB>
                                                                                                                     (1,1-dimethylethoxy) carbonyl<Boc>
 SOL 8
               79698-21-8 REGISTRY
 RN
 REFERENCE 1: 95:187683
 L81 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
               79486-63-8 REGISTRY
 RN
               \hbox{L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-L-phenylalanyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-tryptophyl-D-try
 CN
               lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-phenylethyl]-, cyclic
               (2.fwdarw.7)-disulfide, (S)-, acetate (salt) (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.
 NTE modified (modifications unspecified)
                        ----- location ----- description
  ______
 bridge Cys-2 - Cys-7 disulfide bridge modification - - undetermined modification modification Phe-8 - undetermined modification
  -----
               79486-63-8 REGISTRY
  RN
 REFERENCE 1: 100:23016
  REFERENCE 2: 95:187679
  L81 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2003 ACS on STN
              79486-62-7 REGISTRY
  RN
               L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-
                lysyl-L-threonyl-N-[1-(hydroxymethyl)-2-phenylethyl]-, cyclic
                (2.fwdarw.7)-disulfide, (S)- (9CI) (CA INDEX NAME)
  OTHER CA INDEX NAMES:
  CN 1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane, cyclic peptide deriv.
  NTE modified (modifications unspecified)
  _____
    type ----- location ----- description
   bridge Cys-2 - Cys-7 disulfide bridge modification Phe-8 - undetermined modification
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Page 16

SQL 8

RN

79486-62-7 REGISTRY

REFERENCE 1: 106:770

REFERENCE 2: 100:68700

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L70 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

2002:692513 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

138:117735

Human somatostatin receptor specificity of TITLE:

backbone-cyclic analogs containing novel sulfur

building units

Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, AUTHOR(S): Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

Department of Organic Chemistry, Hebrew University, CORPORATE SOURCE:

Jerusalem, 91904, Israel

Peptides: The Wave of the Future, Proceedings of the SOURCE:

Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San

Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

Conference DOCUMENT TYPE: English LANGUAGE:

The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This

pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor dets. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

IT **252845-42-4**, PTR 3197 **252845-43-5**, PTR 3207

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg.

novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:332670 HCAPLUS

DOCUMENT NUMBER:

136:341003

TITLE:

Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S):

Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S):

Israel

SOURCE:

U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.

No. PCT/IL99/00329.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

GI

English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

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														ID,			
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		MIN,	ωD,	MX,	NO,	NZ,	PL,	E1,	KU,	ΝU,	5D,	2E,	DG,	SI,	DV,	KC	10, K7
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		CI,	CM,	GΑ,	GN,	GW,	ML,						_				
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									US 1	995-	4881	59	A2	1995	0607		
									US 1	995-	5690	42	A2	1995	1207		
									US 1	996-	6906	09	A2	1996	0731		
OTHER S	OTHER SOURCE(S):				MAR	PAT	136:	3410	03								

Q-R5-R6-R7-R8-R9-R10-R11-NR12-X

Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]AB amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where onebridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-42-4P, PTR 3197 252845-43-5P, PTR 3207
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L70 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:203445 HCAPLUS

DOCUMENT NUMBER: 136:386388

TITLE: Synthesis of novel protected N.alpha. (.omega.-

thioalkyl) amino acid building units and their incorporation in backbone cyclic disulfide and

thioetheric bridged peptides

AUTHOR(S): Gazal, S.; Gellerman, G.; Glukhov, E.; Gilon, C.

CORPORATE SOURCE: Department of Organic Chemistry, Hebrew University,

Jerusalem, Israel

SOURCE: Journal of Peptide Research (2001), 58(6), 527-539

CODEN: JPERFA; ISSN: 1397-002X

PUBLISHER: Munksgaard International Publishers Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

General methods for the prepn. of protected N.alpha.(.omega.-thioalkyl) amino acids building units for backbone cyclization using reductive alkylation and on-resin prepn. are described. The synthesis of non-Gly Fmoc-protected S-functionalized N-alkylated amino acids is based on the reaction of readily prepd. protected .omega.-thio aldehyde with the appropriate amino acid. Prepn. of Fmoc-protected S-functionalized N-alkylated Gly building units was carried out using two methods: reaction of glyoxylic acid with Acm-thioalkylamine and an on-resin reaction of bromoacetyl resin with Trt-thioalkylamines. Three model peptides were prepd. using these building units. The GlyS2 building unit was incorporated into a backbone cyclic analog of somatostatin that contains a disulfide bridge. Formation of the disulfide bridge was performed by on-resin oxidn. using I2 or TI(CF3COO-)3. Both methods resulted in the desired product in a high degree of purity in the crude. The AspS3 building unit was also successfully incorporated into a model peptide. addn., the in situ generation of sulfur contg. Gly building units was demonstrated on a Substance P backbone cyclic analog contg. a thioether bridge.

IT 252845-42-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (synthesis of protected thioalkyl amino acids for incorporation in backbone cyclic disulfide and thioetheric bridged peptides using reductive alkylation and on-resin oxidn.)

REFERENCE COUNT:

26 . THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:197431 HCAPLUS

DOCUMENT NUMBER:

136:386384

TITLE:

Human Somatostatin Receptor Specificity of

Backbone-Cyclic Analogues Containing Novel Sulfur

Building Units

AUTHOR(S):

Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

SOURCE:

Journal of Medicinal Chemistry (2002), 45(8),

1665-1671

CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society

PUBLISHER: DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

Somatostatin-14 (somatostatin) and its clin. available analogs AB (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV

revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Acm-S-CH2CH2N(Fmoc)CH2CO2H (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

252845-42-4P 252845-43-5P IT

> RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT:

25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:182173 HCAPLUS

DOCUMENT NUMBER:

136:227293

TITLE:

Selectivity of conformationally constrained backbone cyclized somatostatin analogs with respect to insulin, GH, and glucagon secretion and somatostatin receptor

binding

INVENTOR(S):

Hornik, Vered; Gellerman, Gary; Afargan, Mich El M.

Peptor Limited, Israel

SOURCE:

U.S., 21 pp., Cont.-in-part of U.S. 6,051,554.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

PATENT ASSIGNEE(S):

	PATENT NO. KIND DAT													DATE				
	US	6355	613		. в	1	2002	0312		Ũ	IS 19	98-2	0338	9				
		6051																
		2335																
	WO	9965																
		W:	ΑE,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
			DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
			JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
			MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
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			MD,	RU,	ТJ,	ΜT												
		RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,
			ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,
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															1999			
OTHER	R SC	OURCE	(S):			MAR	PAT	136:										

MARPAT 136:227293

Novel peptides which are conformationally constrained backbone cyclized somatostatin analogs. Methods for synthesizing the somatostatin analogs and for producing libraries of the somatostatin analogs are also disclosed. Furthermore, pharmaceutical compns. comprising somatostatin analogs, and methods of using such compns. are disclosed.

ΙT 252845-42-4P

RL: BSU (Biological study, unclassified); CPN (Combinatorial preparation); THU (Therapeutic use); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)

(selectivity of conformationally constrained backbone cyclized somatostatin analogs with respect to insulin, GH, and glucagon

secretion and somatostatin receptor binding) REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

52

L70 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:783790 HCAPLUS DOCUMENT NUMBER: 136:151429

TITLE: A bioactive somatostatin analog without a type II'

.beta.-turn: synthesis and conformational analysis in

THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS

solution

AUTHOR(S): Jiang, Shaokai; Gazal, Sharon; Gelerman, Gary; Ziv,

Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michael; Gilon, Chaim; Goodman, Murray

CORPORATE SOURCE: Department of Chemistry and Biochemistry, University

of California, San Diego, La Jolla, CA, USA

SOURCE: Journal of Peptide Science (2001), 7(10), 521-528, 2

plates

CODEN: JPSIEI; ISSN: 1075-2617

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

GI

Ι

A cyclic somatostatin analog I has been synthesized. Biol. assays show that this compd. has strong binding affinities to somatostatin hsst2 and hsst5 receptor subtypes (5.2 and 1.2 nM, resp., and modest affinity to hsst4 (41.1 nM)). Our conformational anal. carried out in DMSO-d6 indicates that this compd. exists as two structures arising from the trans and cis configurations of the peptide bond between Phe7 and N-alkylated Gly8. However, neither conformer exhibits a type II' .beta.-turn. This is the first report of a potent bioactive somatostatin analog that does not exhibit a type II' .beta.-turn in soln. Mol. dynamics simulations (500 ps) carried out at 300 K indicate that the backbone of compd. I is more flexible than other cyclic somatostatin analogs formed by disulfide bonds.

ΙT 252845-42-4P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (solid phase peptide synthesis and conformation by NMR of bioactive somatostatin analog without type II .beta.-turn)

THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 36 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L70' ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:811096 HCAPLUS

DOCUMENT NUMBER: 132:50250

TITLE: Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

Peptor Ltd., Israel PATENT ASSIGNEE(S):

SOURCE:

PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

	PA'	rent	NO.		KI	ND	DATE			A	PPLI	CATI	ON NO	Э.	DATE			
	WO	9965													1999			
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			DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
			JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
			MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,
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OTHER	SC	DURCE	(S):			MAR	PAT :	132:5										

MARPAT 132:50250

GΙ

AB Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-42-4P, PTR 3197 252845-43-5P, PTR 3207

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin

analogs)
REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d .seq .69 1-2 YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:n

=> d .seq .169 1-2

L69 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-43-5 REGISTRY

CN Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES: CN PTR 3207

NTE modified (modifications unspecified)

type	- lc	cation	description
bridge stereo stereo	Cys-2 Phe-1 Trp-5	- Gly-9 - - -	covalent bridge D D

SQL 9

SEQ 1 FCFWWKTFG

HITS AT: 2-9

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE · 3: 136:341003

REFERENCE 4: 132:50250

L69 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN

RN

252845-42-4 REGISTRY Glycinamide, L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-

L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic

(1.fwdarw.8)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3197

NTE modified (modifications unspecified)

______ ----- location ----- description type bridge Cys-1 - Gly-8 covalent bridge stereo Trp-4 - D

SQL 8

SEQ 1 CFWWKTFG

1-8

HITS AT:

REFERENCE 1: 138:117735

REFERENCE 2: 136:386388

REFERENCE 3: 136:386384

REFERENCE 4: 136:341003

5: 136:227293 REFERENCE

REFERENCE 6: 136:151429

REFERENCE 7: 132:50250 => fil hcaplus FILE 'HCAPLUS' ENTERED AT 11:49:45 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>

=> d stat que 177 1-4 '1-4' IS NOT VALID HERE

=> d stat que 177

1 SEA FILE=REGISTRY ABB=ON PLU=ON [FY]C[FY].WK.[FA][GVF]/SQSP L76

AND SQL >= 9

4 SEA FILE=HCAPLUS ABB=ON PLU=ON L76 T.77

=> =>

=> d ibib abs hitrn 177 1-4

L77 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:692513 HCAPLUS

DOCUMENT NUMBER:

138:117735

TITLE:

. Human somatostatin receptor specificity of backbone-cyclic analogs containing novel sulfur

building units

AUTHOR(S):

Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

SOURCE:

Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San

Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE:

Conference

LANGUAGE:

English The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to

investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor dets. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

IT **252845-43-5**, PTR 3207

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg.

novel sulfur building units)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:332670 HCAPLUS

DOCUMENT NUMBER: 136:341003

TITLE: Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl.

No. PCT/IL99/00329.

CODEN: USXXCO

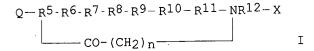
DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

GΙ

PAT	PATENT NO. K				ND	DATE			A	PPLI	CATI	и ис	Э.	DATE			
US US	2002 6051 6355	554 613		A B	1	2000 2002	0418 0312		U	S 19	98-10 98-20	0036 0338	0 9	2000: 1998: 1998:	0619 1202	•	
WO.	9965 W:	AE, DE, JP, MN, TM,	AL, DK, KE, MW,	AM, EE, KG, MX, TT,	AT, ES, KP, NO, UA,	FI, KR, NZ,	AZ, GB, KZ, PL,	BA, GD, LC, PT,	BB, GE, LK, RO,	GH, LR, RU,	BR, GM, LS, SD,	BY, HR, LT, SE,	CA, HU, LU, SG,	CH, ID, LV, SI, AZ,	CN, IL, MD, SK,	IN, MG, SL,	IS, MK, TJ,
PRIORITY	RW: Y APP	GH, ES, CI,	GM, FI, CM,	KE, FR, GA,	LS, GB,	MW, GR, GW,	IE, ML,	IT, MR,	LU, NE, US 1 US 1	MC, SN,	NL, TD, 1003	PT, TG 60 89	SE, A2 A2	CH, BF, 1998 1998	BJ, 0619 1202	DE, CF,	DK, CG,
OTHER SO	OTHER SOURCE(S):				MAR	.PAT	136:		US 1 US 1 US 1	995 - 995- 996-	4881 5690	59 42	A2 A2	1995 1995 1996	0607 1207		



Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,AB amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

252845-43-5P, PTR 3207

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L77 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

2002:197431 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:386384

Human Somatostatin Receptor Specificity of TITLE:

Backbone-Cyclic Analogues Containing Novel Sulfur

Building Units

Gazal, Sharon; Gelerman, Garry; Ziv, Ofer; Karpov, AUTHOR(S):

Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

Department of Organic Chemistry, Hebrew University, CORPORATE SOURCE:

Jerusalem, 91904, Israel

Journal of Medicinal Chemistry (2002), 45(8), SOURCE:

1665-1671

CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society PUBLISHER:

Journal DOCUMENT TYPE:

English

LANGUAGE:

GΙ

Somatostatin-14 (somatostatin) and its clin. available analogs AΒ (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic 'stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Acm-S-CH2CH2N(Fmoc)CH2CO2H (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT 252845-43-5P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged somatostatin analogs)

REFERENCE COUNT:

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L77 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:811096 HCAPLUS

DOCUMENT NUMBER: 132:50250

TITLE: Preparation of conformationally constrained backbone

cyclized somatostatin analogs

INVENTOR(S): Hornik, Vered; Afargan, Michel M.; Gellerman, Gary

PATENT ASSIGNEE(S): Peptor Ltd., Israel SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 10 PATENT INFORMATION:

PATENT NO.			KIND DATE			APPLICATION NO.						DATE					
WO				Al 19991			1223	93 WO 1999-IL329 1999									
	W:													CH,			
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
		JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
		MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,
		TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,
		MD,	RU,	ТJ,	TM												
	RW:													CH,			
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						GW,											
US	US 6051554				A 20000418				US 1998-100360 US 1998-203389						0619		
US	6355	613		B	1	2002	0312		U	S 19	98-2	0338	9	1998	1202		
	2335																
	9942								A	U 19	99-4	2884		1999	0615		
	7475																
EP	1085																
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,															
	2002																
	2002																
PRIORIT	Y APP	LN.	INFO	. :										1998			
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														1995			
														1996			
								1	WO 1	999-	IL32	9	W	1999	0615		
OTHER SO	OURCE	(S):			MAR	PAT :	132:5	5025	0								
GI																•	

Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,AB amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; R11 is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-43-5P, PTR 3207
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> fil reg

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STRUCTURE FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7 DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> =>

=> d .seq 176 tot

L76 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 252845-43-5 REGISTRY

CN Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-tryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES:

CN PTR 3207

NTE modified (modifications unspecified)

type	le	ocation	description	
bridge	Cys-2	- Gly-9	covalent bridge	
stereo	Phe-1		D	
stereo	Trp-5	-	D	

SQL 9

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 9

SEQ 1 FCFWWKTFG

========

HITS AT: 1-9

REFERENCE 1: 138:117735

REFERENCE 2: 136:386384

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 11:44:00 ON 22 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 22 Jul 2003 VOL 139 ISS 4 FILE LAST UPDATED: 21 Jul 2003 (20030721/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d stat que 175

1 SEA FILE=REGISTRY ABB=ON PLU=ON FCFWWKTFG/SQSP L74

4 SEA FILE=HCAPLUS ABB=ON PLU=ON L74 L75

=> =>

 \Rightarrow d ibib abs hitrn 175 1-4

L75 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:692513 HCAPLUS

DOCUMENT NUMBER:

138:117735

TITLE:

Human somatostatin receptor specificity of backbone-cyclic analogs containing novel sulfur

building units

AUTHOR(S):

Gazal, Sharon; Gellerman, Gary; Ziv, Ofer; Karpov, Olga; Litman, Pninit; Bracha, Moshe; Afargan, Michel;

Gilon, Chaim

CORPORATE SOURCE:

Department of Organic Chemistry, Hebrew University,

Jerusalem, 91904, Israel

SOURCE:

Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 626-627. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San

Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE:

Conference English

LANGUAGE:

The synthesis and the biol. properties of novel disulfide bridged backbone cyclic somatostatin analogs were examd. These analogs were prepd. to investigate the influence of the ring size and ring chem. on the binding profile of a parent analog named PTR 3173. PTR 3173 is 1000-fold more potent in the in vivo inhibition of growth hormone (GH) than of glucagon and 10,000-fold more potent inhibitor of GH than of insulin release. This

pharmacol. property is ascribed to the unique binding profile of PTR 3173 and it was suggested that the binding to a specific combination of somatostatin receptors and not a single receptor dets. the physiol. properties of the SST analog. Studies of binding of PTP 73 disulfide-bridged, backbone cyclic analogs to SSTR receptors suggest the effect of ring chem., ring size, and ring position of the peptide template on receptor binding selectivity. The disulfide analogs of PTR 3173 were also highly resistant to a broad spectrum of proteolytic activity compared to somatostatin that was degraded within a few minutes.

252845-43-5, PTR 3207 ΙT

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(somatostatin receptor specificity of backbone-cyclic analogs contg.

novel sulfur building units)

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS 2 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L75 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

2002:332670 HCAPLUS ACCESSION NUMBER:

136:341003 DOCUMENT NUMBER:

Preparation of conformationally constrained backbone TITLE:

cyclized somatostatin analogs

Hornik, Vered; Afargan, Michel M.; Gellerman, Gary INVENTOR(S):

PATENT ASSIGNEE(S): Israel

U.S. Pat. Appl. Publ., 30 pp., Cont.-in-part of Appl. SOURCE:

No. PCT/IL99/00329.

CODEN: USXXCO

Patent DOCUMENT TYPE: English LANGUAGE:

FAMILY ACC. NUM. COUNT: 10

PATENT INFORMATION:

GΙ

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 6355613 WO 9965508 W: AE, A DE, I JP, I	A B1 A1 L, AM, AT K, EE, ES E, KG, KP	, FI, GB, , KR, KZ,	US 1998-100360 19980619 US 1998-203389 19981202
MD, 1 RW: GH, (ES.	U, TJ, TM M, KE, LS I, FR, GB M, GA, GN	MW, SD, B, GR, IE, M, GW, ML,	SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, MR, NE, SN, TD, TG US 1998-100360 A2 19980619 US 1998-203389 A2 19981202 WO 1999-IL329 A2 19990615 US 1995-488159 A2 19950607 US 1995-569042 A2 19951207 US 1996-690609 A2 19960731
OTHER SOURCE(S):	MA	ARPAT 136:	:341003

0 - R5 - R6 - R7 - R8 - R9 - R10 - R11 - NR12 - XΙ — CO- (CH₂)_n—

Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]AB amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; Rll is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

252845-43-5P, PTR 3207

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

L75 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:

2002:197431 HCAPLUS

DOCUMENT NUMBER:

136:386384

TITLE:

Human Somatostatin Receptor Specificity of

Backbone-Cyclic Analogues Containing Novel Sulfur

Building Units

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GΙ

Somatostatin-14 (somatostatin) and its clin. available analogs AB (octreotide, lanreotide and vapreotide) are potent inhibitors of growth hormone, insulin, and glucagon release. Recently, the synthesis of PTR-3173 (I), a novel cyclic somatostatin analog with in vivo endocrine selectivity, was described. I exhibited high affinity to human recombinant somatostatin receptors (hsst) hsst2, hsst4 and hsst5. Its novel binding profile included potent in vivo inhibition of growth hormone but not of insulin release. Here, the synthesis, bioactivity, and structure-activity relationship studies of peptides II (n = 1, 2), III (Xaa = nil, D-Phe) and IV (Xaa = nil, D-Phe, D-Nal) are reported and compared to those of I. In II-IV, the lactam bridge of I was replaced by a backbone disulfide bridge. II-IV showed significant metabolic stability as tested in various enzyme mixts. The receptor binding assays for II-IV revealed that their selectivity had increased towards hsst2 and hsst5, but decreased towards hsst4 in comparison to I. In addn., this work also described the synthesis of sulfur-contg. building units, such as Acm-S-CH2CH2N(Fmoc)CH2CO2H (Acm = acetamidomethyl), for incorporation into peptides as groups capable of forming disulfide bridges.

IT

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and receptor-binding activity of disulfide-bridged somatostatin

THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS 25 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L75 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:811096 HCAPLUS

132:50250

DOCUMENT NUMBER: TITLE:

Preparation of conformationally constrained backbone

INVENTOR(S):

cyclized somatostatin analogs
Hornik, Vered; Afargan, Michel M.; Gellerman, Gary
Peptor Ltd., Israel
PCT Int. Appl., 82 pp.

PATENT ASSIGNEE(S): SOURCE:

CODEN: PIXXD2
Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 10 PATENT INFORMATION:

	PATENT NO.			KIND DATE).	DATE					
	 WO	9965508			A1 19991223				WO 1999-IL329						19990	0615		
		W:	AE.	AL.	AM,	AT,	ΑU,	AZ,	BA,	BB,	ΒG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
			DE,	DK,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,
			JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,
			MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,
			TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,
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	ΑU	9942	884		A	A1 20000105			AU 1999-42884						19990013			
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Novel peptides, e.g., I [n = 1-5; X designates a terminal carboxy acid,]AΒ amide or alc. group; Q is H or a mono- or disaccharide; R5 is .gamma.-aminobutyric acid, diaminobutyric acid, Gly, .beta.-Ala, 5-aminopentanoic acid, or aminohexanoic acid; R6 is D- or L-Phe or Tyr; R7 is D- or L-Trp, -Phe, -1-Nal (1-naphthalenealanine) or -2-Nal, or Tyr; R8 is D- or L-Trp; R9 is D- or L-Lys; R10 is Thr, Gly, Abu (2-aminobutanoic acid), Cys, Val, D- or L-Ala or -Phe; Rll is D- or L-Phe, -Ala, Nle, or Cys; R12 is Gly, Val, Leu, D- or L-Phe or 1Nal or 2Nal], are disclosed which are conformationally constrained backbone cyclized somatostatin analogs having somatostatin receptor sub-type selectivity. Thus, Phe(C3)-Cys*-Phe-D-Trp-Lys-Thr-Cys*-Phe-Phe(N3)-OH (PTR 3205), where one bridge connects the two building units (Phe-C3 and Phe N3, which are phenylalanine modified with carboxy or amine and a three carbon methylene spacer) and the second is a disulfide bridge formed between the two Cys residues, was prepd. by the solid-phase method and showed IC50 = 10-6 nM for inhibition of SRIF binding to transmembranal somatostatin receptors SST-R1, SST-R3 and SST-R5.

IT 252845-43-5P, PTR 3207
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of conformationally constrained backbone cyclized somatostatin analogs)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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21 JUL 2003 HIGHEST RN 552272-14-7 STRUCTURE FILE UPDATES: DICTIONARY FILE UPDATES: 21 JUL 2003 HIGHEST RN 552272-14-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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252845-43-5 REGISTRY RN

Glycinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-L-tryptophyl-D-CNtryptophyl-L-lysyl-L-threonyl-L-phenylalanyl-N2-(2-mercaptoethyl)-, cyclic (2.fwdarw.9)-disulfide (9CI) (CA INDEX NAME)

OTHER NAMES: PTR 3207

NTE modified (modifications unspecified) ______

----- location ----- description Cys-2 - Gly-9 covalent bridge
Phe-1 - D
Trp-5 - D bridge stereo stereo _____

SQL 9

1 FCFWWKTFG SEQ =======

HITS AT: 1-9

1: 138:117735 REFERENCE

2: 136:386384 REFERENCE

REFERENCE 3: 136:341003

REFERENCE 4: 132:50250